

# Decay Resistance of South-west Pacific Rain-forest Timbers

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# DECAY RESISTANCE OF SOUTH-WEST PACIFIC RAIN-FOREST TIMBERS

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## *Summary*

The first part of this paper briefly outlines procedure and collates results of laboratory decay tests for 107 timbers from the Territory of Papua and New Guinea, the Fiji Islands, and the British Solomon Islands Protectorate. The second part tabulates laboratory and local durability ratings, and local common names of the 153 timber species received by the Division of Forest Products since 1961 for testing in the major cooperative research projects for these areas.

## I. INTRODUCTION

A laboratory study has recently been made in the Division of Forest Products, CSIRO, of the decay resistance of more than 100 rain-forest timber species from the Territory of Papua and New Guinea, the Fiji Islands, and the British Solomon Islands Protectorate. This study formed part of a cooperative research project with the forestry department of each of these three regions. Detailed results of some of these tests have already been published (Da Costa and Osborne 1967; Osborne 1967), but as all current tests of these species have now been completed, this publication collates and compares results for all island timbers tested in this laboratory since 1961.

## II. LABORATORY TESTS

### *(a) Method*

The accelerated laboratory decay method used in this investigation has been described in detail by Da Costa and Osborne (1967). It is a "soil-block" method and consists essentially of subjecting sterilized blocks of the timbers to attack by pure cultures of wood-rotting fungi. The fungus is grown on thin strips of susceptible sapwood placed on sterile moist soil half-filling a screw-top glass jar and then two sterile test blocks are placed on the fungus. The decay occurring during the incubation period of 8 weeks (12 weeks for *Pycnoporus coccineus*) is measured as a percentage weight loss based on the initial air dry weight of the block. Four wood-destroying fungi were used in these tests, two brown-rotting fungi—*Coniophora olivacea* (Fr.) Karst. DFP 1779 and *Lenzites trabea* Pers. ex Fries (DFP 8845)—and two white-rotting fungi—*Pycnoporus coccineus* (Fr.) Bond. & Sing. (DFP 2544) and *Fomes lividus* (Kalch.) Sacc. (DFP 7904).

### *(b) Sampling*

Unless otherwise stated only heartwood material was tested as the sapwood of almost all species is susceptible to decay. Due regard was given to the variation in durability across the radius of the heartwood by sampling from the outermost heartwood, expected to be the most durable, and from a position

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thought to be representative of the rest of the heartwood. Results showed that, in general, the outermost heartwood was more resistant than wood nearer the centre of the tree.

Wherever possible material from five trees was tested for each timber species. However, results have been included for species where fewer than five trees were available, but the reliability of a species assessment of durability will depend on the number of trees tested. In a few cases, after testing had begun, examination of botanical material showed that there was more than one botanical species within the "species" collected, two or more genera sometimes being represented. Wherever the botanical species have been found to be very similar in appearance in the field, and in anatomical structure, physical and strength properties, and durability the mixture has been regarded as one commercial species. These species mixtures are indicated in the tables. Where a species differed appreciably from the main species of the group it has been omitted.

An examination of the correlation between basic density and decay resistance, and between water uptake and decay resistance was made for a number of the rain-forest timbers from New Guinea and Fiji (Da Costa and Osborne 1967; Osborne 1967). Although there was not a close correlation in either case, it was shown that there was a tendency, both among species and within a species, for the denser and less water-absorbent wood to be more resistant to decay.

### (c) *Durability Ratings*

Detailed results of the decay resistance tests are presented in Tables 1-6. These results are from laboratory decay tests only and therefore do not directly indicate expected life of a particular timber in service. However, they give useful comparisons of decay resistance between timber species, which, to date, have not been contradicted by the few service data and graveyard test results which are available. As these laboratory tests are only comparative, five "yardstick" exotic timbers, whose durabilities are well known and which represent a wide range of durability, were included.

Difficulties were encountered in arriving at a single durability rating from the values for percentage weight loss from tests against four different fungi, and these difficulties have been discussed elsewhere (Da Costa and Osborne 1967). Some slight differences in the degree of attack were also shown between different tests. Nevertheless, the timbers have been grouped into classes, mainly by reference to the yardstick timbers of known durability.

These durability classes are not directly related to the durability classes (1-4) used for Australian timbers. The latter classification is based on the resistance of eucalypt poles, posts, etc. in ground contact, i.e. severe decay hazard. Interest in these rain-forest timbers lies in their use as general building timbers more than as poles and posts in ground contact, and consequently the classes used here are based on slightly less severe service conditions.

Those timber species designated as "durable" show decay resistance comparable to that of *Eucalyptus microcorys* F. Muell. (tallowwood) and *Tectona grandis* L.f. (teak). *E. microcorys* is representative of the highly durable timbers used in Australia for prolonged service in ground contact, whilst *T. grandis* has an

TABLE 1  
DECAY RESISTANCE OF NEW GUINEA TIMBERS—FIRST TEST

| Timber Species                     | DFP<br>Shipment<br>No. | Mean Percentage Weight Loss* Caused by: |                               |                            |                                | Mean | Laboratory<br>Rating  |
|------------------------------------|------------------------|---|-------------------------------|----------------------------|--------------------------------|------|-----------------------|
|                                    |                        | <i>Fomes<br/>lividus</i>                | <i>Pycnopus<br/>coccineus</i> | <i>Lenzites<br/>trabea</i> | <i>Coniophora<br/>olivacea</i> |      |                       |
| <i>Eucalyptus microcorys</i> †     | —                      | 0.4                                     | 0.2                           | 0.2                        | 0.4                            | 0.3  | Durable               |
| <i>Hopea iriana</i>                | 1335                   | 1.9                                     | 0.1                           | 0.4                        | 2.4                            | 1.2  |                       |
| <i>Intsia bijuga</i>               | 1300                   | 7.4                                     | —0.5                          | —0.3                       | —0.4                           | 1.6  |                       |
| <i>Vitex cofassus</i>              | 1304                   | 0.7                                     | 2.3                           | 1.5                        | 2.5                            | 1.8  |                       |
| <i>Garuga floribunda</i>           | 1332                   | 2.1                                     | 4.9                           | 1.7                        | 2.8                            | 2.9  |                       |
| <i>Tectona grandis</i> †           | —                      | 6.3                                     | 1.9                           | 1.3                        | 3.0                            | 3.1  | Moderately<br>durable |
| <i>Pterocarpus indicus</i>         | 1301                   | 11.0                                    | 0.9                           | 1.6                        | 1.3                            | 3.7  |                       |
| <i>Ganophyllum falcatum</i>        | 1386                   | 5.7                                     | 6.9                           | 1.4                        | 3.0                            | 4.2  |                       |
| <i>Planchonia papuana</i>          | 1357                   | 6.6                                     | 2.9                           | 0.8                        | 9.6                            | 5.0  |                       |
| <i>Homalium foetidum</i>           | 1352                   | 5.7                                     | 3.9                           | 4.3                        | 13.0                           | 6.7  |                       |
| <i>Eucalyptus obliqua</i> †        | —                      | 12.8                                    | 2.4                           | —0.2                       | 19.4                           | 8.6  | Slightly<br>durable   |
| <i>Cinnamomum</i> sp.              | 1354                   | 15.7                                    | 9.1                           | 9.2                        | 3.6                            | 9.4  |                       |
| <i>Eugenia</i> sp.                 | 1382                   | 9.6                                     | 12.6                          | 2.2                        | 18.4                           | 10.7 |                       |
| <i>Syzygium buettnerianum</i>      | 1305                   | 11.6                                    | 12.6                          | 3.8                        | 17.1                           | 11.3 |                       |
| <i>Amoora cucullata</i>            | 1310                   | 13.4                                    | 12.7                          | 5.3                        | 22.1                           | 13.4 |                       |
| <i>Anisoptera polyandra</i>        | 1316                   | 16.4                                    | 15.7                          | 5.7                        | 17.7                           | 13.9 | Non-<br>durable       |
| <i>Pseudotsuga menziesii</i> †     | —                      | 10.6                                    | 4.1                           | 16.0                       | 34.6                           | 16.3 |                       |
| <i>Eucalyptus deglupta</i>         | 1320                   | 23.2                                    | 14.0                          | 8.9                        | 20.2                           | 16.6 |                       |
| <i>Toona sureni</i>                | 1309                   | 23.9                                    | 14.2                          | 6.2                        | 22.5                           | 16.7 |                       |
| <i>Planchonella torricellensis</i> | 1368                   | 21.7                                    | 24.0                          | 8.7                        | 14.6                           | 17.2 |                       |
| <i>Calophyllum papuanum</i>        | 1315                   | 12.5                                    | 15.3                          | 14.1                       | 27.6                           | 17.4 | Non-<br>durable       |
| <i>Pometia tomentosa</i>           | 1312                   | 19.1                                    | 17.0                          | 15.0                       | 24.8                           | 19.0 |                       |
| <i>Dracontomelum mangiferum</i>    | 1311                   | 20.1                                    | 31.4                          | 11.3                       | 22.8                           | 21.4 |                       |
| <i>Chisocheton</i> sp.             | 1359                   | 26.8                                    | 43.0                          | 4.2                        | 23.5                           | 24.4 |                       |
| <i>Araucaria hunsteinii</i>        | —                      | 23.6                                    | 18.5                          | 28.3                       | 36.6                           | 26.8 |                       |
| <i>Pterygota horsfieldii</i>       | 1369                   | 24.6                                    | 39.9                          | 9.4                        | 34.6                           | 27.1 | Non-<br>durable       |
| <i>Anthocephalus chinensis</i>     | 1328                   | 25.3                                    | 37.5                          | 30.3                       | 18.0                           | 27.8 |                       |
| <i>Pinus radiata</i> (sapwood)†    | —                      | 24.7                                    | 22.6                          | 29.6                       | 40.2                           | 29.3 |                       |
| <i>Octomeles sumatrana</i>         | 1302                   | 31.2                                    | 39.5                          | 26.2                       | 31.8                           | 32.2 |                       |
| <i>Flindersia amboinensis</i>      | 1373                   | 25.5                                    | 39.0                          | 32.9                       | 32.3                           | 32.4 |                       |
| <i>Ailanthus peckelii</i>          | 1380                   | 29.6                                    | —                             | —                          | 40.0                           | 34.8 |                       |

\* Mean percentage weight loss of inner and outer heartwood blocks from five trees of each species.

† Reference timbers of known durability included for comparison.

TABLE 2  
DECAY RESISTANCE OF NEW GUINEA TIMBERS—SECOND TEST

| Timber Species                     | DFP Shipment No. | Mean Percentage Weight Loss* Caused by: |                             |                        |                            | Mean | Laboratory Rating  |
|------------------------------------|------------------|---|-----------------------------|------------------------|----------------------------|------|--------------------|
|                                    |                  | <i>Fomes lividus</i>                    | <i>Pycnoporus coccineus</i> | <i>Lenzites trabea</i> | <i>Coniophora olivacea</i> |      |                    |
| <i>Eucalyptus microcoryst</i> †    | —                | 0.5                                     | -1.3                        | -1.3                   | -0.7                       | -0.7 | Durable            |
| <i>Tectona grandis</i> †           | —                | 5.3                                     | 2.0                         | 2.7                    | 2.6                        | 3.2  |                    |
| <i>Elmerrillia papuana</i>         | 1358             | 6.5                                     | 2.9                         | 2.0                    | 13.7                       | 6.3  | Moderately durable |
| <i>Dysoxylum</i> sp.               | 1390             | 14.8                                    | 3.6                         | -0.1                   | 7.3                        | 6.4  |                    |
| <i>Nothofagus perryi</i>           | 1495             | 9.9                                     | 3.8                         | 0.7                    | 11.9                       | 6.6  |                    |
| <i>Xanthophyllum papuanum</i>      | 1379             | 13.3                                    | 15.8                        | 3.6                    | 5.2                        | 9.5  |                    |
| <i>Eucalyptus obliqua</i> †        | —                | 14.7                                    | 2.9                         | 0.9                    | 21.8                       | 10.1 | Slightly durable   |
| <i>Castanopsis acuminatissima</i>  | 1494             | 22.3                                    | 11.7                        | 1.2                    | 21.8                       | 14.2 |                    |
| <i>Manilkota psilogyne</i>         | 1395             | 24.3                                    | 20.9                        | 3.8                    | 17.1                       | 16.5 |                    |
| <i>Schizomeria serrata</i>         | 1383             | 16.7                                    | 11.7                        | 20.3                   | 25.3                       | 18.5 |                    |
| <i>Cordia dichotoma</i>            | 1389             | 29.3                                    | 9.8                         | 10.7                   | 24.7                       | 18.6 | Non-durable        |
| <i>Pseudotsuga menziesii</i> †     | —                | 19.0                                    | 5.7                         | 14.9                   | 36.5                       | 19.0 |                    |
| <i>Sloanea forbesii</i>            | 1385             | 33.3                                    | 37.6                        | 5.0                    | 9.2                        | 21.3 |                    |
| <i>Elaeocarpus sphaericus</i>      | 1337             | 38.2                                    | 17.3                        | 7.4                    | 31.1                       | 23.5 |                    |
| <i>Sloanea</i> sp.                 | 1384             | 34.0                                    | 35.6                        | 6.3                    | 20.5                       | 24.1 | Non-durable        |
| <i>Tetrameles nudiflora</i>        | 1375             | 14.7                                    | 13.1                        | 34.7                   | 34.1                       | 24.2 |                    |
| <i>Terminalia kaernbachii</i>      | 1333             | 34.0                                    | 24.1                        | 17.5                   | 24.2                       | 25.0 |                    |
| <i>Duabanga moluccana</i>          | 1318             | 47.5                                    | 28.7                        | 5.3                    | 21.8                       | 25.8 |                    |
| <i>Albizia falcata</i>             | 1319             | 50.1                                    | 12.1                        | 23.0                   | 25.3                       | 27.6 | Non-durable        |
| <i>Mastixiodendron pachyclados</i> | 1393             | 23.9                                    | 39.0                        | 19.5                   | 31.6                       | 28.5 |                    |
| <i>Chisocheton schumannii</i>      | 1387             | 29.6                                    | 38.3                        | 26.7                   | 31.3                       | 31.5 |                    |
| <i>Pinus radiata</i> (sapwood)†    | —                | 27.9                                    | 21.8                        | 36.3                   | 42.4                       | 32.1 |                    |
| <i>Canarium oleosum</i>            | 1331             | 45.8                                    | 34.5                        | 23.7                   | 33.1                       | 34.3 | Non-durable        |
| <i>Myristica buchneriana</i>       | 1360             | 49.8                                    | 34.1                        | 28.6                   | 33.9                       | 36.6 |                    |
| <i>Celtis nymani</i>               | 1372             | 39.4                                    | 43.9                        | 31.3                   | 34.8                       | 37.4 |                    |
| <i>Pterocymbium beccarii</i>       | 1306             | 47.4                                    | 45.9                        | 23.4                   | 34.2                       | 37.7 |                    |
| <i>Spondias dulcis</i>             | 1308             | 44.4                                    | 45.0                        | 28.0                   | 38.0                       | 38.8 | Non-durable        |
| <i>Endospermum medullosum</i>      | 1321             | 47.0                                    | 35.3                        | 35.1                   | 38.9                       | 39.1 |                    |
| <i>Buchanania macrocarpa</i>       | 1307             | 58.6                                    | 53.1                        | 38.5                   | 43.1                       | 48.3 |                    |

\* Mean percentage weight loss of inner and outer heartwood blocks from five trees of each species.

† Reference timbers of known durability included for comparison.

TABLE 3  
DECAY RESISTANCE OF NEW GUINEA TIMBERS—THIRD TEST

| Timber Species                             | DFP<br>Shipment<br>No. | No. of<br>Trees<br>Tested | Mean Percentage Weight Loss* Caused by: |                                 |                            |                                | Mean | Laboratory<br>Rating  |
|--|------------------------|---------------------------|---|---------------------------------|----------------------------|--------------------------------|------|-----------------------|
|  |                        |                           | <i>Fomes<br/>lividus</i>                | <i>Pycnoporus<br/>coccineus</i> | <i>Lenzites<br/>trabea</i> | <i>Coniophora<br/>olivacea</i> |      |                       |
| <i>Pleiotyngium timoriense</i>             | 1399                   | 5                         | 1.0                                     | 0.5                             | -0.2                       | -0.5                           | 0.2  | Durable               |
| <i>Manilkara kanosensis</i>                | 1483                   | 2                         | 1.2                                     | 0.0                             | 0.2                        | 0.5                            | 0.5  |                       |
| <i>Eucalyptus microcoryst</i> †            | —                      | 5                         | 1.4                                     | 0.5                             | 0.3                        | 0.5                            | 0.7  |                       |
| <i>Cathormion umbellatum</i>               | 1482                   | 5                         | 0.9                                     | 1.3                             | 0.8                        | 0.4                            | 0.8  |                       |
| <i>Tectona grandis</i> †                   | —                      | 5                         | 2.7                                     | 2.2                             | 0.1                        | -0.3                           | 1.2  |                       |
| <i>Gmelina moluccana</i>                   | 1374                   | 2                         | 1.5                                     | 2.7                             | 1.2                        | 3.0                            | 2.1  | Moderately<br>durable |
| <i>Neonauclea papuana</i>                  | 1366                   | 3                         | 4.5                                     | 5.4                             | 3.3                        | 11.2                           | 6.1  |                       |
| <i>Tristiropsis canarioides</i>            | 1388/1388A             | 5                         | 12.7                                    | 22.0                            | -0.2                       | 14.8                           | 12.3 | Slightly<br>durable   |
| <i>Eucalyptus obliqua</i> †                | —                      | 5                         | 20.8                                    | 11.3                            | 1.4                        | 19.0                           | 13.1 |                       |
| <i>Pseudotsuga menziesii</i> †             | —                      | 5                         | 9.0                                     | 3.2                             | 10.5                       | 30.4                           | 13.3 |                       |
| <i>Heritiera</i> sp. cf. <i>littoralis</i> | 1394                   | 5                         | 17.0                                    | 22.1                            | 1.8                        | 24.4                           | 16.3 |                       |
| <i>Drypetes</i> spp. ‡                     | 1391                   | 5                         | 18.1                                    | 32.5                            | 3.8                        | 23.3                           | 19.4 |                       |
| <i>Terminalia complanata</i>               | 1378                   | 4                         | 26.8                                    | 31.2                            | 9.5                        | 24.8                           | 23.1 | Non-<br>durable       |
| <i>Podocarpus anarus</i>                   | 1361                   | 3                         | 11.3                                    | 18.8                            | 36.3                       | 33.7                           | 25.0 |                       |
| <i>Pinus radiata</i> (sapwood)†            | —                      | 5                         | 20.2                                    | 33.4                            | 28.7                       | 39.4                           | 30.4 |                       |
| <i>Diospyros</i> sp.                       | 1398                   | 5                         | 24.5                                    | 31.1                            | 40.2                       | 34.2                           | 32.5 |                       |
| <i>Planchonella kaernbachiana</i>          | 1326                   | 4                         | 30.8                                    | 37.8                            | 25.0                       | 40.0                           | 33.4 |                       |
| <i>Flindersia pimenteliana</i>             | 1317                   | 4                         | 35.2                                    | 55.6                            | 28.1                       | 29.2                           | 37.0 |                       |
| <i>Cryptocarya</i> spp. ‡                  | 1355                   | 2                         | 41.8                                    | 45.5                            | 37.0                       | 49.6                           | 43.5 |                       |

\* Mean percentage weight loss of inner and outer heartwood blocks from two to five trees of each species.

† Reference timbers of known durability included for comparison.

‡ Groups consisting of more than one botanical species but regarded as one commercial group (see Table 7).

TABLE 4  
DECAY RESISTANCE OF FIJIAN TIMBERS—FIRST TEST

| Timber Species                  | DFP<br>Shipment<br>No. | No. of<br>Trees<br>Tested | Mean Percentage Weight Loss* Caused by: |                                 |                            |                                | Mean | Laboratory<br>Rating  |
|---------------------------------|------------------------|---------------------------|---|---------------------------------|----------------------------|--------------------------------|------|-----------------------|
|                                 |                        |                           | <i>Fomes<br/>lividus</i>                | <i>Pycnoporus<br/>coccineus</i> | <i>Lenzites<br/>trabea</i> | <i>Coniophora<br/>olivacea</i> |      |                       |
| <i>Palaequium hornei</i>        | 1417                   | 4                         | 0.5                                     | 0.2                             | —0.1                       | 0.1                            | 0.2  | Durable               |
| <i>Eucalyptus microcorys</i> †  | —                      | 5                         | 0.6                                     | 1.2                             | 0.2                        | 0.5                            | 0.6  |                       |
| <i>Intsia bijuga</i>            | 1421                   | 4                         | 2.4                                     | 0.2                             | 0.0                        | 0.2                            | 0.7  |                       |
| <i>Fagraea gracilipes</i>       | 1422                   | 2                         | 0.9                                     | 1.2                             | 1.6                        | 1.8                            | 1.4  |                       |
| <i>Tectona grandis</i> †        | —                      | 5                         | 2.6                                     | 2.0                             | 1.2                        | 0.3                            | 1.5  |                       |
| <i>Syzygium</i> spp.‡           | 1406                   | 14                        | 6.7                                     | 3.3                             | 0.7                        | 6.1                            | 4.2  | Moderately<br>durable |
| <i>Eucalyptus obliqua</i> †     | —                      | 5                         | 9.2                                     | 1.5                             | 0.1                        | 14.9                           | 6.4  |                       |
| <i>Dacrydium</i> spp.‡          | 1419                   | 3                         | 6.2                                     | 10.1                            | 1.8                        | 8.3                            | 6.6  |                       |
| <i>Podocarpus nerifolius</i>    | 1414                   | 4                         | 4.4                                     | 1.0                             | 7.8                        | 16.6                           | 7.4  |                       |
| <i>Garcinia myrtifolia</i>      | 1408                   | 5                         | 13.2                                    | 8.8                             | 1.9                        | 6.9                            | 7.7  |                       |
| <i>Heritiera ornithocephala</i> | 1416                   | 5                         | 13.9                                    | 9.0                             | 2.3                        | 6.3                            | 7.9  |                       |
| <i>Swietenia macrophylla</i>    | 1401                   | 5                         | 19.5                                    | 5.4                             | 2.6                        | 5.1                            | 8.2  |                       |
| <i>Palaequium fidiense</i> ‡    | 1411                   | 5                         | 15.7                                    | 10.0                            | 2.7                        | 6.3                            | 8.7  |                       |
| <i>Serianthes myriadenia</i>    | 1410                   | 5                         | 26.0                                    | 9.1                             | 6.3                        | 14.1                           | 13.9 | Slightly<br>durable   |
| <i>Pseudotsuga menziesii</i> †  | —                      | 5                         | 10.6                                    | 4.4                             | 19.0                       | 32.2                           | 16.6 |                       |
| <i>Calophyllum</i> spp.‡        | 1404                   | 5                         | 22.6                                    | 14.2                            | 8.7                        | 21.4                           | 16.7 |                       |
| <i>Casuarina nodiflora</i> ‡    | 1420                   | 4                         | 19.7                                    | 26.5                            | 5.1                        | 18.2                           | 17.4 |                       |
| <i>Eucalyptus citriodora</i>    | 1405                   | 4                         | 24.4                                    | 27.9                            | 7.8                        | 18.6                           | 19.7 |                       |
| <i>Decussocarpus vitiensis</i>  | 1413                   | 5                         | 13.3                                    | 21.2                            | 17.8                       | 27.8                           | 20.0 |                       |
| <i>Alphitonia zizyphoides</i>   | 1424                   | 2                         | 32.9                                    | 33.8                            | 10.3                       | 10.6                           | 21.9 |                       |
| <i>Agathis vitiensis</i>        | 1412                   | 5                         | 21.5                                    | 24.0                            | 28.7                       | 27.0                           | 25.3 | Non-<br>durable       |
| <i>Parinari insularum</i>       | 1409                   | 5                         | 29.6                                    | 31.7                            | 16.9                       | 27.4                           | 26.4 |                       |
| <i>Terminalia pterocarpa</i>    | 1418                   | 4                         | 40.6                                    | 32.6                            | 17.2                       | 25.0                           | 28.8 |                       |
| <i>Gonystylus punctatus</i>     | 1415                   | 4                         | 29.3                                    | 32.0                            | 28.6                       | 31.0                           | 30.2 |                       |
| <i>Dacrycarpus imbricatus</i>   | 1426                   | 3                         | 22.0                                    | 32.0                            | 35.8                       | 31.3                           | 30.3 |                       |
| <i>Pinus radiata</i> (sapwood)† | —                      | 5                         | 23.7                                    | 27.2                            | 33.1                       | 39.7                           | 30.9 |                       |
| <i>Canarium</i> spp.‡           | 1407/1425              | 5                         | 48.0                                    | 28.9                            | 24.7                       | 30.4                           | 33.0 |                       |
| <i>Endospermum macrophyllum</i> | 1403                   | 5                         | 41.9                                    | 44.0                            | 33.8                       | 36.4                           | 39.0 |                       |
| <i>Myristica</i> spp.‡          | 1402                   | 5                         | 54.1                                    | 44.2                            | 29.0                       | 39.6                           | 41.7 |                       |
| <i>Trichospermum richii</i>     | 1423                   | 4                         | 60.7                                    | 55.7                            | 31.4                       | 46.1                           | 48.5 |                       |

\* Mean percentage weight loss of inner and outer heartwood blocks from two to 14 trees of each species.

† Reference timbers of known durability included for comparison.

‡ Groups consisting of more than one botanical species but regarded as one commercial group (see Table 7).

TABLE 5  
DECAY RESISTANCE OF FIJIAN TIMBERS—SECOND TEST

| Timber Species                  | DFP<br>Shipment<br>No. | No. of<br>Trees<br>Tested | Mean Percentage Weight Loss* Caused by: |                                 |                            |                                | Mean | Laboratory<br>Rating  |
|---------------------------------|------------------------|---------------------------|---|---------------------------------|----------------------------|--------------------------------|------|-----------------------|
|                                 |                        |                           | <i>Fomes<br/>lividus</i>                | <i>Pycnoporus<br/>coccineus</i> | <i>Lenzites<br/>trabea</i> | <i>Coniophora<br/>olivacea</i> |      |                       |
| <i>Eucalyptus microcoryst</i> † | —                      | 5                         | 1.4                                     | 0.5                             | 0.3                        | 0.5                            | 0.7  | Durable               |
| <i>Fagraea gracilipes</i>       | 1422                   | 3                         | 0.4                                     | 0.9                             | 1.1                        | 1.1                            | 0.8  |                       |
| <i>Tectona grandis</i> †        | —                      | 5                         | 2.7                                     | 2.2                             | 0.1                        | —0.3                           | 1.2  |                       |
| <i>Bischofia javanica</i>       | 1551                   | 5                         | 1.2                                     | 2.3                             | —0.2                       | 5.5                            | 2.2  | Moderately<br>durable |
| <i>Planchonella vittensis</i>   | 1557                   | 5                         | 12.4                                    | 15.8                            | 5.8                        | 6.5                            | 10.1 | Slightly<br>durable   |
| <i>Metrosideros collina</i>     | 1556                   | 5                         | 11.4                                    | 21.1                            | 2.3                        | 11.4                           | 11.6 |                       |
| <i>Dysoxylum</i> spp.‡          | 1552                   | 5                         | 14.1                                    | 14.2                            | 4.8                        | 17.6                           | 12.7 |                       |
| <i>Maniltoa</i> spp.‡           | 1553                   | 5                         | 11.7                                    | 20.3                            | 4.6                        | 15.2                           | 13.0 |                       |
| <i>Eucalyptus obliqua</i> †     | —                      | 5                         | 20.8                                    | 11.3                            | 1.4                        | 19.0                           | 13.1 |                       |
| <i>Pseudotsuga menziesii</i> †  | —                      | 5                         | 9.0                                     | 3.2                             | 10.5                       | 30.4                           | 13.3 |                       |
| <i>Acacia richii</i>            | 1559                   | 5                         | 25.3                                    | 21.4                            | 2.8                        | 22.4                           | 18.0 | Non-<br>durable       |
| <i>Eucalyptus deglupta</i>      | 1560                   | 5                         | 31.4                                    | 39.7                            | 14.3                       | 30.3                           | 28.9 |                       |
| <i>Pinus radiata</i> (sapwood)† | —                      | 5                         | 20.2                                    | 33.4                            | 28.7                       | 39.4                           | 30.4 |                       |

\* Mean percentage weight loss of inner and outer heartwood blocks from three to five trees of each species.

† Reference timbers of known durability included for comparison.

‡ Groups consisting of more than one botanical species but regarded as one commercial group (see Table 7).

TABLE 6  
DECAY RESISTANCE OF SOLOMON ISLAND TIMBERS

| Timber Species                  | DFP<br>Shipment<br>No. | No. of<br>Trees<br>Tested | Mean Percentage Weight Loss* Caused by: |                                 |                            |                                | Mean | Laboratory<br>Rating  |
|---------------------------------|------------------------|---------------------------|---|---------------------------------|----------------------------|--------------------------------|------|-----------------------|
|                                 |                        |                           | <i>Fomes<br/>lividus</i>                | <i>Pycnoporus<br/>coccineus</i> | <i>Lenzites<br/>trabea</i> | <i>Coniophora<br/>olivacea</i> |      |                       |
| <i>Burckella obovata</i>        | 1615                   | 5                         | 1.4                                     | -1.2                            | -0.5                       | -0.1                           | -0.1 | Durable               |
| <i>Eucalyptus microcorys</i> †  | —                      | 5                         | 0.9                                     | -0.1                            | 0.1                        | 0.6                            | 0.4  |                       |
| <i>Palaquium</i> spp. ‡         | 1610                   | 5                         | 4.2                                     | -1.4                            | -0.2                       | -0.9                           | 0.4  |                       |
| <i>Eugenia onesima</i>          | 1627                   | 3                         | 2.0                                     | -0.9                            | -1.2                       | 3.8                            | 0.9  |                       |
| <i>Tectona grandis</i> †        | —                      | 5                         | 4.0                                     | -0.7                            | 1.6                        | 0.4                            | 1.3  |                       |
| <i>Anoora cucullata</i>         | 1618                   | 3                         | 4.5                                     | -1.2                            | -0.6                       | 8.0                            | 2.7  | Moderately<br>durable |
| <i>Calophyllum kajewskii</i>    | 1600                   | 5                         | -0.8                                    | -1.8                            | 1.1                        | 13.4                           | 3.0  |                       |
| <i>Gmelina moluccana</i>        | 1606                   | 5                         | 2.2                                     | -1.6                            | 3.5                        | 8.6                            | 3.2  |                       |
| <i>Eugenia tierneyana</i>       | 1630                   | 2                         | 6.4                                     | 1.2                             | 0.8                        | 8.8                            | 4.3  |                       |
| <i>Planchonella firma</i> ‡     | 1625                   | 3                         | 10.3                                    | -0.4                            | 8.6                        | 18.2                           | 9.2  | Slightly<br>durable   |
| <i>Eucalyptus obliqua</i> †     | —                      | 5                         | 13.7                                    | 7.3                             | 2.0                        | 19.3                           | 10.6 |                       |
| <i>Maranthes corymbosa</i>      | 1624                   | 3                         | 11.5                                    | 2.2                             | 7.0                        | 21.6                           | 10.6 |                       |
| <i>Pseudotsuga menziesii</i> †  | —                      | 5                         | 4.5                                     | 1.6                             | 9.9                        | 27.8                           | 11.0 |                       |
| <i>Tristropis acutangula</i>    | 1632                   | 3                         | 7.3                                     | 1.6                             | 19.2                       | 29.9                           | 12.8 |                       |
| <i>Parinari salomonensis</i>    | 1622                   | 3                         | 13.8                                    | 2.7                             | 12.2                       | 25.7                           | 13.6 |                       |
| <i>Dysoxylum</i> spp. ‡         | 1631                   | 3                         | 20.2                                    | 4.6                             | 8.6                        | 30.0                           | 15.8 |                       |
| <i>Pinus radiata</i> (sapwood)† | —                      | 5                         | 10.8                                    | 9.2                             | 33.7                       | 44.2                           | 24.5 | Non-durable           |

\* Mean percentage weight loss of inner and outer heartwood from two to five trees of each species.

† Reference timbers of known durability included for comparison.

‡ Group consisting of more than one botanical species but regarded as one commercial group (see Table 7).



international reputation for durability, although it may not give extremely long service in the ground. The "moderately durable" species are comparable in resistance to *Eucalyptus obliqua* L'Herit. (messmate) which has been used extensively in south-eastern Australia in situations of moderately high decay hazard, and gives reasonable service even in ground contact.

The "slightly durable" species appear to be too susceptible to decay for satisfactory use in ground contact or in other situations of high decay hazard. They may be compared with *Pseudotsuga menziesii* (Mirb.) Franco (Douglas fir) which has low durability in the ground, but which gives satisfactory service in exposed woodwork not in ground contact. The "non-durable" timbers may be compared with sapwood of *Pinus radiata* D. Don (radiata pine) which is unsatisfactory for any external unprotected use in humid climatic conditions.

### III. COLLATED INFORMATION ON DURABILITY RATINGS

Table 7 lists all the timber species tested in the laboratory together with relevant experimental information. Wherever possible, durability assessments from other sources have been included as additional information and for comparison with the laboratory ratings. Samples of a number of other timber species were also received but were not tested as, in most cases, closely related species had been evaluated or else previous information suggested that the timber would not be durable. However, as there is very little information readily accessible on most of these timbers, they are included in the list together with any durability assessments available from other sources.

The timbers are listed in Table 7 in alphabetical order of their generic names. Table 8 cross-references common names to these botanical names. Botanical names, authorities, and standard trade common names are listed according to Australian Standard 0118-1968 (Standards Association of Australia 1968). Other common names, where available, are included, but only those used in the country from which our samples were received. These are listed according to the Australian Standard 0118-1968, Whitmore (1966), and Territory of Papua and New Guinea, Department of Forests (1967).

#### (a) *Durability Ratings by Previous Authors*

Natural durability information from four sources has been included in Table 7. Ratings from Territory of Papua and New Guinea, Department of Forests (1967), are listed as:

- T1 "very durable, suitable for long-term use in the ground";
- T2 "durable, suitable for use in the ground and for unprotected exterior use in buildings";
- T3 "moderately durable, suitable for protected exterior work and for interior use";
- T4 "non-durable, not suitable for exterior use unless treated".

These ratings are based on the resistance of untreated heartwood to attack by wood-destroying fungi and termites. Whilst they are not to be regarded as completely authoritative ratings, they give some indication of likely resistance.

Ratings from Colwell (1965) are listed as C1–C5 and are based on the results of graveyard tests conducted in New Guinea:

- C1 “survival in excess of 60 months”;
- C2 “general survival after 36 months but subject to general deterioration”;
- C3 “complete ground level failure within 24–36 months”;
- C4 “complete ground level failure within 12–24 months”;
- C5 “complete ground level failure within 12 months”.

Ratings based on graveyard tests are listed by Alston (1966) for Fijian timbers, heartwood stakes (2 ft by 2 in. by 2 in.) having been used. His ratings are:

- A1 “very durable, average life of stakes over 10 years”;
- A2 “durable, average life of stakes 5–10 years”;
- A3 “non-durable, average life of stakes 2–5 years”;
- A4 “perishable, average life of stakes 2 years or less”.

Richardson (1967) listed the durability of a number of West Irian timbers and these are noted as R1–R5 and are as follows:

| Class | Life Expectancy (yr) |                          |            |
|-------|----------------------|--------------------------|------------|
|       | In Contact with Soil | Exposed, No Soil Contact | Unexposed  |
| R1    | 8                    | 20                       | Unlimited  |
| R2    | 5                    | 15                       | Unlimited  |
| R3    | 3                    | 10                       | Unlimited* |
| R4    | —                    | A few years*             | 10         |
| R5    | —                    | —                        | —          |

\*If protected from moisture.

#### (b) Utilization of Timbers

In the utilization of these rain-forest timbers other major factors besides durability should also be considered and extensive investigations are proceeding within the Division of Forest Products on such aspects as sapwood susceptibility to *Lyctus* borer, treatability of heartwood, and mechanical properties (Bolza and Kloot 1966). Some general publications collating these data for individual timbers have been prepared by the respective forestry departments.

#### IV. ACKNOWLEDGMENTS

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TABLE 7

## DURABILITY RATINGS OF RAIN-FOREST TIMBERS

Origin: TPNG, Territory of Papua and New Guinea; Fiji, Fiji Islands; BSIP, British Solomon Islands Protectorate. Other trade names for country of origin of test material also given. Durability ratings by previous authors (pp. 11, 12): T1-T4 from TPNG, Department of Forests (1967); C1-C5 from Colwell (1965); A1-A4 from Alston (1966); R1-R5 from Richardson (1967). Ratings in parenthesis to be regarded with some caution either because they are: *a*, general rating for genus; *b*, rating for related species; or *c*, rating regarded by its authors as uncertain. n.t., material not tested

| Timber Species   | Botanical Family          | Standard Trade Common Name (AS0118-1968) | Other Trade Names    | Origin of Test Material | Durability Ratings by Previous Authors | DFP Shipment No. | No. of Trees Tested | Laboratory Durability Ratings |
|--|---------------------------|--|----------------------|-------------------------|--|------------------|---------------------|-------------------------------|
| <i>Acacia richii</i> A. Gray   | Leguminosae (Mimosoideae) | qumu                                     |                      | Fiji                    |  | 1559             | 5                   | Slightly durable              |
| <i>Acicalyptus elliptica</i> A. C. Smith—see <i>Syzygium</i> spp. (yasi-yasi II)           |                           |  |                      | Fiji                    |  | 1406             |                     |                               |
| <i>Acicalyptus eugenioides</i> (Seem.) Drake—see <i>Syzygium</i> spp. (yasi-yasi II)       |                           |  |                      | Fiji                    |  | 1406             |                     |                               |
| <i>Acicalyptus longiflora</i> A. C. Smith—see <i>Syzygium</i> spp. (yasi-yasi II)          |                           |  |                      | Fiji                    |  | 1406             |                     |                               |
| <i>Agathis dammara</i> (A. B. Lamb.) L. C. Rich. [syn. <i>A. alba</i> (A. B. Lamb.) Foxw.] | Araucariaceae             | East Indian kauri                        | kauri pine           | TPNG                    | T4                                     | 1490             | n.t.                |                               |
| <i>Agathis vitiensis</i> (Seem.) Drake   | Araucariaceae             | Fijian kauri                             | dakua makadre        | Fiji                    | A3                                     | 1412             | 5                   | Non-durable                   |
| <i>Ailanthus peckelii</i> Melch.   | Simarubaceae              | white siris                              |                      | TPNG                    | T4, C3                                 | 1380             | 5                   | Non-durable                   |
| <i>Albizia falcata</i> (L.) Backer ex Merr.  | Leguminosae (Mimosoideae) | NG albizzia                              |                      | TPNG                    | T4, R4-5                               | 1319             | 5                   | Non-durable                   |
| <i>Albizia falcata</i> (L.) Backer ex Merr.—see <i>Albizia</i> spp.                        |                           |  |                      | BSIP                    |  | 1614             |                     |                               |
| <i>Albizia minahassae</i> Koord.—see <i>Albizia</i> spp.                                   |                           |  |                      | BSIP                    |  | 1614             |                     |                               |
| <i>Albizia</i> spp.  |                           |  |                      | BSIP                    |  | 1614             | n.t.                |                               |
| <i>A. falcata</i> (L.) Backer ex Merr.   | Leguminosae (Mimosoideae) | BSIP albizzia                            | fai, gaganu, mamafai | BSIP                    | (T4) <sup>a</sup>                      | 1614             |                     |                               |
| <i>A. minahassae</i> Koord. (regarded as one commercial group)                             |                           |  |                      |                         |  |                  |                     |                               |
| <i>Alphitonia zizyphoides</i> (Spreng.) A. Gray  | Rhamnaceae                | doi                                      |                      | Fiji                    | (T4) <sup>a</sup>                      | 1424             | 2                   | Slightly durable              |

TABLE 7 (Continued)

| Timber Species  | Botanical Family          | Standard Trade Common Name (AS0118-1968) | Other Trade Names              | Origin of Test Material | Durability Ratings by Previous Authors    | DFP Shipment No. | No. of Trees Tested | Laboratory Durability Ratings |
|---|---------------------------|--|--------------------------------|-------------------------|---|------------------|---------------------|-------------------------------|
| <i>Alstonia scholaris</i> (L.) R. Br.                                   | Apocynaceae               | white cheesewood                         | milkwood, milky pine           | TPNG                    | T4, R5                                    | 1303             | n.t.                |                               |
| <i>Alstonia scholaris</i> (L.) R. Br.                                   | Apocynaceae               | white cheesewood                         | aitonga, suala, taba'a         | BSIP                    | T4, R5                                    | 1609             | n.t.                |                               |
| <i>Alstonia spectabilis</i> (L.) R. Br.                                 | Apocynaceae               | cheesewood                               | gwatasaliu, siliu'u            | BSIP                    | T2-3, R3                                  | 1620             | n.t.                |                               |
| <i>Amoora cucullata</i> Roxb.   | Meliaceae                 | NG amoora                                |                                | TPNG                    | (T3-4) <sup>c</sup> , (R2-3) <sup>a</sup> | 1310             | 5                   | Slightly durable              |
| <i>Amoora cucullata</i> Roxb.   | Meliaceae                 | BSIP amoora                              |                                | BSIP                    | (T3-4) <sup>c</sup> , (R2-3) <sup>a</sup> | 1618             | 3                   | Moderately durable            |
| <i>Anisoptera polyandra</i> Bl.   | Dipterocarpaceae          | garawa                                   | anisoptera                     | TPNG                    | T3, C2, R4                                | 1316             | 5                   | Slightly durable              |
| <i>Anthocephalus chinensis</i> (Lam.) A. Rich.                          | Rubiaceae                 | laran                                    | labula                         | TPNG                    | T4, R5                                    | 1328             | 5                   | Non-durable                   |
| ex Walp. [syn. <i>A. cadamba</i> (Roxb.) Miq.]                          |                           |  |                                |                         |   |                  |                     |                               |
| <i>Antiaris toxicaria</i> (Rumph. ex Pers.) Lesch.                      | Moraceae                  | NG antiaris                              |                                | TPNG                    | T4  | 1314             | n.t.                |                               |
| <i>Araucaria hunsteinii</i> K. Schum. (syn. <i>A. klinkii</i> Lauterb.) | Araucariaceae             | klinki pine                              | Bulolo pine, pai, rassu        | TPNG                    | T4  | —                | 5                   | Non-durable                   |
| <i>Archidendron oblongum</i> (Hemsl.) de Wit                            | Leguminosae (Mimosoideae) | lamilami                                 |                                | BSIP                    |   | 1623             | n.t.                |                               |
| <i>Barringtonia edulis</i> Seem.  | Lecythidaceae             | vutu                                     |                                | Fiji                    | A4, (T4) <sup>b</sup>                     | 1555             | n.t.                |                               |
| <i>Bischofia javanica</i> Bl.   | Euphorbiaceae             | bishop wood                              | koka                           | Fiji                    | T3, A2, R2                                | 1551             | 5                   | Moderately durable            |
| <i>Brachychiton carruthersii</i> F. Muell.                              | Sterculiaceae             | NG brachychiton                          |                                | TPNG                    | (T3) <sup>c</sup>                         | 1481             | n.t.                |                               |
| <i>Bridelia minutiflora</i> Hook. f.                                    | Euphorbiaceae             | bridelia                                 | scrub ironbark                 | TPNG                    | R3  | 1497             | n.t.                |                               |
| <i>Buchanania macrocarpa</i> Lauterb.                                   | Anacardiaceae             | buchanania                               | pink satinwood                 | TPNG                    | (T4) <sup>a</sup> , (R4) <sup>a</sup>     | 1307             | 5                   | Non-durable                   |
| <i>Burckella obovata</i> (Forst.) Pierre                                | Sapotaceae                | BSIP burckella                           | faigona, kona                  | BSIP                    | (T4) <sup>c</sup> , (R4) <sup>a</sup>     | 1615             | 5                   | Durable                       |
| <i>Calophyllum kajewskii</i> A. C. Smith                                | Guttiferae                | BSIP calophyllum                         | ba'ula                         | BSIP                    | (R2-4) <sup>a</sup>                       | 1600             | 5                   | Moderately durable            |
| <i>Calophyllum leucocarpum</i> A. C. Smith—see <i>Calophyllum</i> spp.  |                           |  |                                | Fiji                    |   | 1404             |                     |                               |
| <i>Calophyllum papuanum</i> Lauterb.                                    | Guttiferae                | NG calophyllum                           | island cedar, bush calophyllum | TPNG                    | T3, (R2-4) <sup>a</sup>                   | 1315             | 5                   | Slightly durable              |

TABLE 7 (Continued)

| Timber Species  | Botanical Family | Standard Trade Common Name (AS0118-1968) | Other Trade Names       | Origin of Test Material | Durability Ratings by Previous Authors | DFP Shipment No. | No. of Trees Tested | Laboratory Durability Ratings |
|---|------------------|--|-------------------------|-------------------------|--|------------------|---------------------|-------------------------------|
| <i>Calophyllum vitiense</i> Turr.   | Guttiferae       | BSIP                                     | gwaragwaro              | BSIP                    | (R2-4) <sup>a</sup>                    | 1607             | n.t.                |                               |
| <i>Calophyllum vitiense</i> Turr.—see <i>Calophyllum</i> spp.                                 |                  | calophyllum                              |                         | Fiji                    |  | 1404             |                     |                               |
| <i>Calophyllum</i> spp.   |                  |  |                         |                         |  |                  |                     |                               |
| <i>C. leucocarpum</i> A. C. Smith   | Guttiferae       | Fijian                                   | damanu                  | Fiji                    | A3, (R2-4) <sup>a</sup>                | 1404             | 2 }<br>3 }          | Slightly durable              |
| <i>C. vitiense</i> Turr.<br>(regarded as one commercial group)                                |                  | calophyllum                              |                         |                         |  |                  |                     |                               |
| <i>Camposperma brevipetiolata</i> Volkens   | Anacardiaceae    | camposperma                              | karamati,<br>karamut    | TPNG                    | T4, R5                                 | 1329             | n.t.                |                               |
| <i>Camposperma brevipetiolata</i> Volkens   | Anacardiaceae    | camposperma                              | ketekete                | BSIP                    | T4, R5                                 | 1602             | n.t.                |                               |
| <i>Canarium indicum</i> L.  | Burseraceae      | galip                                    |                         | TPNG                    | T4, R4-5                               | 1381             | n.t.                |                               |
| <i>Canarium oleosum</i> (Lam.) Engl.  | Burseraceae      | NG canarium                              |                         | TPNG                    | R4, (T4) <sup>a</sup>                  | 1331             | 5                   | Non-durable                   |
| <i>Canarium salomonense</i> Burtt.  | Burseraceae      | BSIP                                     | adoa                    | BSIP                    | (T4) <sup>a</sup>                      | 1612             | n.t.                |                               |
| <i>Canarium smithii</i> Leenh.—see <i>Canarium</i> spp. No. 1407/1425                         |                  | canarium                                 |                         | Fiji                    |  | 1407 }<br>1425 } |                     |                               |
| <i>Canarium vitiense</i> A. Gray—see <i>Canarium</i> spp. No. 1407/1425                       |                  |  |                         | Fiji                    |  | 1407             |                     |                               |
| <i>Canarium vitiense</i> A. Gray—see <i>Canarium</i> spp. No. 1628                            |                  |  |                         | BSIP                    |  | 1628             |                     |                               |
| <i>Canarium</i> sp. aff. <i>C. vitiense</i> A. Gray—see <i>Canarium</i> spp. No. 1407/1425    |                  |  |                         | Fiji                    |  | 1407             |                     |                               |
| <i>Canarium</i> spp.  |                  |  |                         |                         |  |                  |                     |                               |
| <i>C. smithii</i> Leenh.  | Burseraceae      | Fijian                                   | kaunicina-<br>kaunigai  | Fiji                    | A3, (T4) <sup>a</sup>                  | 1407 }<br>1425 } | 3 }<br>1 }<br>1 }   | Non-durable                   |
| <i>C. vitiense</i> A. Gray  |                  | canarium                                 |                         |                         |  |                  |                     |                               |
| <i>Canarium</i> sp. aff. <i>C. vitiense</i> A. Gray (regarded as one commercial group)        |                  |  |                         |                         |  |                  |                     |                               |
| <i>Canarium</i> spp. (includes <i>C. vitiense</i> A. Gray) (regarded as one commercial group) | Burseraceae      | BSIP                                     | malangali,<br>bulangali | BSIP                    | (T4) <sup>a</sup>                      | 1628             | n.t.                |                               |
|   |                  | canarium                                 |                         |                         |  |                  |                     |                               |

TABLE 7 (Continued)

| Timber Species  | Botanical Family          | Standard Trade Common Name (AS0118-1968) | Other Trade Names | Origin of Test Material | Durability Ratings by Previous Authors | DFP Shipment No. | No. of Trees Tested | Laboratory Durability Ratings |
|---|---------------------------|--|-------------------|-------------------------|--|------------------|---------------------|-------------------------------|
| <i>Castanopsis acuminatissima</i> (Bl.) A. DC. ex Hance   | Fagaceae                  | NG oak                                   |                   | TPNG                    | (T2-3) <sup>c</sup>                    | 1494             | 5                   | Slightly durable              |
| <i>Casuarina nodiflora</i> Forst. (includes <i>Gymnostoma vitense</i> L. A. S. Johnson) (regarded as one commercial group)  | Casuarinaceae             | Fijian beach she-oak                     | velau             | Fiji                    | A3, (T2-3) <sup>b</sup>                | 1420             | 3 }<br>1 }          | Slightly durable              |
| <i>Cathormion umbellatum</i> (Vahl.) Kosterm.   | Leguminosae (Mimosoideae) | cathormion                               |                   | TPNG                    |  | 1482             | 5                   | Durable                       |
| <i>Cedrela toona</i> Roxb. ex Rottl. et Willd.—see <i>Toona sureni</i>  |                           |  |                   | TPNG                    |  | 1309             |                     |                               |
| <i>Celtis latifolia</i> (Bl.) Planch.   | Ulmaceae                  | BSIP celtis                              | la'usi            | BSIP                    | T4, R4-5                               | 1619             | n.t.                |                               |
| <i>Celtis nymani</i> K. Schum.  | Ulmaceae                  | NG celtis                                |                   | TPNG                    | T4, C4                                 | 1372             | 5                   | Non-durable                   |
| <i>Celtis philippinensis</i> Blanco   | Ulmaceae                  | BSIP celtis                              | laelae            | BSIP                    | T4                                     | 1617             | n.t.                |                               |
| <i>Chisocheton schumanii</i> C. DC.   | Meliaceae                 | kiso                                     | chisocheton       | TPNG                    | T4, (R4) <sup>a</sup>                  | 1387             | 5                   | Non-durable                   |
| <i>Chisocheton</i> sp.  | Meliaceae                 | kiso                                     | chisocheton       | TPNG                    | (T4) <sup>a</sup> , (R4) <sup>a</sup>  | 1359             | 5                   | Non-durable                   |
| <i>Cinnamomum</i> sp.   | Lauraceae                 | NG cordia                                | cinnamomum        | TPNG                    | C3, (T3) <sup>b</sup>                  | 1354             | 5                   | Moderately durable            |
| <i>Cordia dichotoma</i> Forst.  | Boraginaceae              |  |                   | TPNG                    | T4                                     | 1389             | 5                   | Slightly durable              |
| <i>Cryptocarya</i> spp.   | Lauraceae                 | moustiquaire                             | cryptocarya       | TPNG                    | T3-4, R4-5                             | 1355             | 2                   | Non-durable                   |
| <i>Cynometra insularis</i> A. C. Smith—see <i>Maniltoa</i> spp.   |                           |  |                   | Fiji                    |  | 1553             |                     |                               |
| <i>Dacrycarpus imbricatus</i> var. <i>patulus</i> de Laubenfels [formerly <i>Podocarpus imbricatus</i> Bl. (syn. <i>P. javanicus</i> Bl.)]  | Podocarpaceae             | red podocarp                             | amunu             | Fiji                    |  | 1426             | 3                   | Non-durable                   |
| <i>Dacrydium nausoriensis</i> de Laubenfels—see <i>Dacrydium</i> spp.   |                           |  |                   | Fiji                    |  | 1419             |                     |                               |
| <i>Dacrydium nidulum</i> var. <i>nidulum</i> de Laubenfels—see <i>Dacrydium</i> spp.  |                           |  |                   | Fiji                    |  | 1419             |                     |                               |
| <i>Dacrydium</i> spp. (formerly cited as <i>D. elatum</i> Wall.). Consists of <i>D. nausoriensis</i> de Laubenfels and <i>D. nidulum</i> var. <i>nidulum</i> de Laubenfels (regarded as one commercial group) | Podocarpaceae             | dacrydium                                | yaka              | Fiji                    | A2, (T2-3) <sup>b</sup>                | 1419             | 3                   | Moderately durable            |

TABLE 7 (Continued)

| Timber Species  | Botanical Family | Standard Trade Common Name (AS0118-1968) | Other Trade Names | Origin of Test Material | Durability Ratings by Previous Authors                        | DFP Shipment No. | No. of Trees Tested | Laboratory Durability Ratings |
|---|------------------|--|-------------------|-------------------------|---|------------------|---------------------|-------------------------------|
| <i>Decussocarpus vitensis</i> (Seem.) de Laubenfels, comb. nov. (formerly <i>Podocarpus vitensis</i> Seem.) | Podocarpaceae    | dakua salusalu, red podocarp             |                   | Fiji                    | A3  | 1413             | 5                   | Slightly durable              |
| <i>Degeneria vitensis</i> I. W. Bailey et A. C. Smith   | Degeneriaceae    | masiratu                                 |                   | Fiji                    |   | 1561             | n.t.                |                               |
| <i>Dillenia salomonensis</i> (C. T. White) Hoogl.   | Dilleniaceae     | dillenia                                 | mudi              | BSIP                    | (T4) <sup>a</sup> , (R3-5) <sup>a</sup>                       | 1604             | n.t.                |                               |
| <i>Diospyros</i> sp.  | Ebenaceae        | NG ebony                                 | tumi              | TPNG                    | (T3) <sup>b</sup> , (R5) <sup>a</sup>                         | 1398             | 5                   | Non-durable                   |
| <i>Dracontomelum mangiferum</i> Bl.   | Anacardiaceae    | NG walnut                                | Pacific walnut    | TPNG                    | T3, R3-4  | 1311             | 5                   | Non-durable                   |
| <i>Drypetes</i> spp.  | Euphorbiaceae    | NG drypetes                              |                   | TPNG                    | R3  | 1391             | 5                   | Slightly durable              |
| <i>Duabanga moluccana</i> Bl.   | Sonneratiaceae   | NG duabanga                              |                   | TPNG                    | T4  | 1318             | 5                   | Non-durable                   |
| <i>Dysoxylum quercifolium</i> (Seem.) A. C. Smith.—see <i>Dysoxylum</i> spp.                                |                  |  |                   | Fiji                    |   | 1552             |                     |                               |
| <i>Dysoxylum richii</i> (A. Gray) C. DC.—see <i>Dysoxylum</i> spp.  |                  |  |                   | Fiji                    |   | 1552             |                     |                               |
| <i>Dysoxylum</i> sp.  | Meliaceae        | NG mahogany dysoxylum                    |                   | TPNG                    | (T2-3) <sup>a</sup> , (C2) <sup>a</sup> , (R2-3) <sup>a</sup> | 1390             | 5                   | Moderately durable            |
| <i>Dysoxylum</i> spp.   | Meliaceae        | sasauira                                 |                   | Fiji                    | (T2-3) <sup>a</sup> , (C2) <sup>a</sup> , (R2-3) <sup>a</sup> | 1552             | 3<br>2              | Slightly durable              |
| <i>D. quercifolium</i> (Seem.) A. C. Smith  |                  |  |                   |                         |   |                  |                     |                               |
| <i>D. richii</i> (A. Gray) C. DC. (regarded as one commercial group)  |                  |  |                   |                         |   |                  |                     |                               |
| <i>Dysoxylum</i> spp.   |                  |  |                   |                         |   |                  |                     |                               |
| <i>Elaeocarpus sphaericus</i> (Gaertn.) K. Schum.   | Elaeocarpaceae   | sasauira                                 | airande           | BSIP                    | (T2-3) <sup>a</sup> , (C2) <sup>a</sup> , (R2-3) <sup>a</sup> | 1631             | 3                   | Slightly durable              |
| <i>Elaeocarpus sphaericus</i> (Gaertn.) K. Schum.   | Elaeocarpaceae   | NG quandong                              |                   | TPNG                    | T4, C4, (R5) <sup>a</sup>                                     | 1337             | 5                   | Non-durable                   |
|   | Elaeocarpaceae   | BSIP quandong                            | milo              | BSIP                    | T4, C4, (R5) <sup>a</sup>                                     | 1608             | n.t.                |                               |

TABLE 7 (Continued)

| Timber Species   | Botanical Family | Standard Trade Common Name (AS0118-1968) | Other Trade Names              | Origin of Test Material | Durability Ratings by Previous Authors    | DFP Shipment No. | No. of Trees Tested | Laboratory Durability Ratings |
|--|------------------|--|--------------------------------|-------------------------|---|------------------|---------------------|-------------------------------|
| <i>Elmerrillia papuana</i> (Schlecht.) Dandy   | Magnoliaceae     | Wau beech                                | hui, elmerril                  | TPNG                    | T2, R2                                    | 1358             | 5                   | Moderately durable            |
| <i>Endospermum macrophyllum</i> (Muell. Arg.) Pax et Hoffm. (Test specimens may have included sapwood) | Euphorbiaceae    | Fijian basswood                          | kauvula, Fijian white silkwood | Fiji                    | A4  | 1403             | 5                   | Non-durable                   |
| <i>Endospermum medulosum</i> Becc. (Test specimens may have included sapwood)                          | Euphorbiaceae    | NG basswood                              |                                | TPNG                    | T4  | 1321             | 5                   | Non-durable                   |
| <i>Endospermum medulosum</i> Becc.   | Euphorbiaceae    | BSIP                                     | a'asa                          | BSIP                    | T4  | 1605             | n.t.                |                               |
| <i>Eucalyptus citriodora</i> Hook.   | Myrtaceae        | basswood lemon-scented gum               | citriodora                     | Fiji (plntn)            |   | 1405             | 4                   | Slightly durable              |
| <i>Eucalyptus deglupta</i> Bl.   | Myrtaceae        | kamarere                                 |                                | TPNG                    | T3  | 1320             | 5                   | Slightly durable              |
| <i>Eucalyptus deglupta</i> Bl.   | Myrtaceae        | kamarere                                 | deglupta                       | Fiji (plntn)            | T3  | 1560             | 5                   | Non-durable                   |
| <i>Eugenia effusa</i> A. Gray—see <i>Syzygium</i> spp. (yasi-yasi I)                                   |                  |  |                                | Fiji                    |   | 1406             |                     |                               |
| <i>Eugenia onesima</i> (Merr. et Perry) Whitmore   | Myrtaceae        | obah                                     | aibu, aimela                   | BSIP                    | (T2-3) <sup>a</sup> , (R2-3) <sup>a</sup> | 1627             | 3                   | Durable                       |
| <i>Eugenia tierneyana</i> F. Muell.  | Myrtaceae        | obah                                     | aifau, rufa, malamalarufa      | BSIP                    | (T2-3) <sup>a</sup> , (R2-3) <sup>a</sup> | 1630             | 2                   | Moderately durable            |
| <i>Eugenia</i> sp.   | Myrtaceae        | obah                                     | watgum, NG satinash            | TPNG                    | (T2-3) <sup>a</sup> , (R2-3) <sup>a</sup> | 1382             | 5                   | Moderately durable            |
| <i>Fagraea gracilipes</i> A. Gray  | Loganiaceae      | buabua                                   |                                | Fiji                    | A1, (T3) <sup>a</sup>                     | 1422             | 5                   | Durable                       |
| <i>Flindersia amboinensis</i> Poir.  | Rutaceae         | NG silver ash                            | NG maple                       | TPNG                    | T3-4, (R4-5) <sup>a</sup>                 | 1373             | 5                   | Non-durable                   |
| <i>Flindersia heterophylla</i> Merr. et Perry  | Rutaceae         | NG maple                                 | scented maple                  | TPNG                    | T3-4, (R4-5) <sup>a</sup>                 | 1323             | n.t.                |                               |
| <i>Flindersia pimenteliana</i> F. Muell.   | Rutaceae         | NG maple                                 | silkwood maple                 | TPNG                    | T3-4, (R4-5) <sup>a</sup>                 | 1317             | 4                   | Non-durable                   |
| <i>Ganophyllum falcatum</i> Bl.  | Sapindaceae      | scaly ash                                |                                | TPNG                    | T3, R3                                    | 1386             | 5                   | Moderately durable            |
| <i>Garcinia myrtifolia</i> A. C. Smith   | Guttiferae       | mangosteen                               | laubu, kandis                  | Fiji                    | A3, (T3) <sup>a</sup>                     | 1408             | 5                   | Moderately durable            |
| <i>Garuga floribunda</i> Decne.  | Burseraceae      | garuga                                   |                                | TPNG                    | T4  | 1332             | 5                   | Durable                       |



TABLE 7 (Continued)

| Timber Species  | Botanical Family               | Standard Trade Common Name (AS0118-1968) | Other Trade Names | Origin of Test Material | Durability Ratings by Previous Authors    | DFP Shipment No. | No. of Trees Tested | Laboratory Durability Ratings |
|---|--------------------------------|--|-------------------|-------------------------|---|------------------|---------------------|-------------------------------|
| <i>Gmelina moluccana</i> (Bl.) Backer ex K. Hayne                                     | Verbenaceae                    | white beech                              |                   | TPNG                    | (T3-4) <sup>c</sup> , R5                  | 1374             | 2                   | Moderately durable            |
| <i>Gmelina moluccana</i> (Bl.) Backer ex K. Hayne (syn. <i>G. salomonensis</i> Bakh.) | Verbenaceae                    | white beech                              | arokoko           | BSIP                    | (T3-4) <sup>c</sup> , R5                  | 1606             | 5                   | Moderately durable            |
| <i>Gonystylus macrophyllus</i> (Miq.) Airy Shaw                                       | Gonystylaceae                  | BSIP ramin                               | nunura            | BSIP                    | T4  | 1621             | n.t.                |                               |
| <i>Gonystylus punctatus</i> A. C. Smith   | Gonystylaceae                  | Fijian ramin                             | mavota            | Fiji                    | A4  | 1415             | 4                   | Non-durable                   |
| <i>Gymnostoma vittense</i> L. A. S. Johnson—see <i>Casuarina nodiflora</i>            |                                |  |                   | Fiji                    |   | 1420             |                     |                               |
| <i>Heritiera ornithocephala</i> Kosterm.  | Sterculiaceae                  | rosarosa                                 |                   | Fiji                    | A2, (T2-4) <sup>b</sup>                   | 1416             | 5                   | Moderately durable            |
| <i>Heritiera</i> sp. cf. <i>H. littoralis</i> Ait.                                    | Sterculiaceae                  | NG heritiera                             |                   | TPNG                    | (T2-4) <sup>b</sup>                       | 1394             | 5                   | Slightly durable              |
| <i>Homalium foetidum</i> (Roxb.) Benth. (syn. <i>H. luzoniense</i> F. Vill.)          | Flacourtiaceae                 | malas                                    |                   | TPNG                    | T2-3, R1-2                                | 1352             | 5                   | Moderately durable            |
| <i>Hopea iriana</i> van Sloot.  | Dipterocarpaceae               | giam                                     | hopea             | TPNG                    | C1, (T2) <sup>a</sup> , (R1) <sup>a</sup> | 1335             | 5                   | Durable                       |
| <i>Horsfieldia irya</i> (Gaertn.) Warb.   | Myristicaceae                  | nutmeg                                   |                   | TPNG                    | T4, (R5) <sup>a</sup>                     | 1397             | n.t.                |                               |
| <i>Intsia bijuga</i> (Colebr.) O. Kuntze  | Leguminosae (Caesalpinioideae) | kwila                                    |                   | TPNG                    | T1, C1, A2, (R1) <sup>a</sup>             | 1300             | 5                   | Durable                       |
| <i>Intsia bijuga</i> (Colebr.) O. Kuntze  | Leguminosae (Caesalpinioideae) | kwila                                    | vesi              | Fiji                    | T1, C1, A2, (R1) <sup>a</sup>             | 1421             | 4                   | Durable                       |
| <i>Kermadecia vitiensis</i> Turr.   | Proteaceae                     | kauceuti                                 |                   | Fiji                    | A3  | 1554             | n.t.                |                               |
| <i>Mangifera minor</i> Bl.  | Anacardiaceae                  | mango                                    |                   | TPNG                    | T4, C4                                    | 1313             | n.t.                |                               |
| <i>Manilkara kanosensis</i> H. J. Lam. et B. Meeuse                                   | Sapotaceae                     | manilkara                                |                   | TPNG                    | T1-3                                      | 1483             | 2                   | Durable                       |
| <i>Maniltoa grandiflora</i> (A. Gray) Scheff.—see <i>Maniltoa</i> spp.                |                                |  |                   | Fiji                    |   | 1553             |                     |                               |
| <i>Maniltoa minor</i> A. C. Smith—see <i>Maniltoa</i> spp.                            |                                |  |                   | Fiji                    |   | 1553             |                     |                               |
| <i>Maniltoa psilogyne</i> Harms   | Leguminosae (Caesalpinioideae) | maniltoa                                 |                   | TPNG                    | T2-3                                      | 1395             | 5                   | Slightly durable              |

TABLE 7 (Continued)

| Timber Species  | Botanical Family               | Standard Trade Common Name (AS0118-1968) | Other Trade Names            | Origin of Test Material | Durability Ratings by Previous Authors | DFP Shipment No. | No. of Trees Tested | Laboratory Durability Ratings |
|---|--------------------------------|--|------------------------------|-------------------------|--|------------------|---------------------|-------------------------------|
| <i>Manittoa</i> spp.  | Leguminosae (Caesalpinioideae) | manittoa                                 | moivi                        | Fiji                    | (T2-3) <sup>a</sup>                    | 1553             | 2                   | Slightly durable              |
| <i>M. grandiflora</i> (A. Gray) Scheff.   |                                |  |                              |                         |  |                  | 1                   |                               |
| <i>M. minor</i> A. C. Smith   |                                |  |                              |                         | (T4) <sup>a</sup>                      |                  | 2                   |                               |
| <i>Cynometra insularis</i> A. C. Smith (regarded as one commercial group)   | Rosaceae                       |  | aisiksiki                    | BSIP                    |  | 1624             | 3                   | Slightly durable              |
| <i>Maranthes corymbosa</i> Bl.  | Rubiaceae                      | garo-garo                                |                              | TPNG                    | T2, R3                                 | 1393             | 5                   | Non-durable                   |
| <i>Mastixiodendron pachyclados</i> (K. Schum.) Melch.   | Myrtaceae                      | vuga                                     |                              | Fiji                    | (R1) <sup>a</sup>                      | 1556             | 5                   | Slightly durable              |
| <i>Metrosideros collina</i> (J. R. & G. Forst.) A. Gray (includes several varieties, mainly <i>M. collina</i> var. <i>vitiensis</i> A. Gray) (regarded as one commercial group) |                                |  |                              |                         |  |                  |                     |                               |
| <i>Myristica buchneriana</i> Warb.  | Myristicaceae                  | nutmeg                                   |                              | TPNG Fiji               | T4                                     | 1360             | 5                   | Non-durable                   |
| <i>Myristica castanefolia</i> A. Gray—see <i>Myristica</i> spp.   |                                |  |                              |                         |  | 1402             |                     |                               |
| <i>Myristica charitacea</i> Gillespie—see <i>Myristica</i> spp.   |                                |  |                              |                         |  | 1402             |                     |                               |
| <i>Myristica hypargyrea</i> A. Gray—see <i>Myristica</i> spp.   |                                |  |                              |                         |  | 1402             |                     |                               |
| <i>Myristica</i> spp.   | Myristicaceae                  | nutmeg                                   | kaudamu, Fijian pencil cedar | Fiji                    | A4, (T4) <sup>a</sup>                  | 1402             | 1                   | Non-durable                   |
| <i>M. castanefolia</i> A. Gray  |                                |  |                              |                         |  |                  | 2                   |                               |
| <i>M. charitacea</i> Gillespie  |                                |  |                              |                         |  |                  | 2                   |                               |
| <i>M. hypargyrea</i> A. Gray (regarded as one commercial group)   |                                |  |                              |                         |  |                  |                     |                               |
| <i>Neonauclea papuana</i> (Valeton) Merr. et Perry  | Rubiaceae                      | yellow hardwood                          |                              | TPNG                    | (T2-3) <sup>a</sup>                    | 1366             | 3                   | Moderately durable            |
| <i>Neoscortechinia forbesii</i> (Hook. f.) C. T. White  | Euphorbiaceae                  | aiasila                                  |                              | BSIP                    |  | 1626             | n.t.                |                               |
| <i>Neuburgia corynocarpa</i> (A. Gray) Leenh.   | Loganiaceae                    | neuburgia                                |                              | TPNG                    | T4                                     | 1492             | n.t.                |                               |
| <i>Nothofagus perryi</i> Steen.   | Fagaceae                       | NG beech                                 | gripe                        | TPNG                    | (T2-3) <sup>c</sup>                    | 1495             | 5                   | Moderately durable            |
| <i>Nothofagus perryi</i> Steen.   | Fagaceae                       | NG beech                                 | gripe                        | TPNG                    | (T2-3) <sup>c</sup>                    | 1491             | n.t.                |                               |

TABLE 7 (Continued)

| Timber Species  | Botanical Family | Standard Trade Common Name (AS0118-1968) | Other Trade Names             | Origin of Test Material | Durability Ratings by Previous Authors           | DFP Shipment No. | No. of Trees Tested | Laboratory Durability Ratings |
|---|------------------|--|-------------------------------|-------------------------|--|------------------|---------------------|-------------------------------|
| <i>Octomeles sumatrana</i> Miq.   | Datiaceae        | erima                                    | ilimo                         | TPNG<br>BSIP            | T4, C5, R5                                       | 1302<br>1625     | 5                   | Non-durable                   |
| <i>Palaquium amboinense</i> Burck.—see <i>Planchonella firma</i>  |                  |  |                               |                         |  |                  |                     |                               |
| <i>Palaquium fijiense</i> Pierre (includes <i>Palaquium</i> sp. nov.) (regarded as one commercial group)        | Sapotaceae       | bauvudi                                  | Fijian maple                  | Fiji                    | A4, (T4) <sup>a</sup> , (R4) <sup>a</sup>        | 1411             | 4 }<br>1 }          | Moderately durable            |
| <i>Palaquium hornei</i> (Hartog ex Baker) Dub.  | Sapotaceae       | Fijian palaquium                         | sacau, red silkwood           | Fiji                    | A2, (T4) <sup>a</sup> (R4) <sup>a</sup>          | 1417             | 4                   | Durable                       |
| <i>Palaquium</i> spp.   | Sapotaceae       | BSIP palaquium                           | faibaru, maliolo              | BSIP                    | (T4) <sup>a</sup> , (R4) <sup>a</sup>            | 1610             | 5                   | Durable                       |
| <i>Parinari insularum</i> A. Gray   | Rosaceae         | Fijian parinari                          | sa                            | Fiji                    | A4, (T2) <sup>b</sup>                            | 1409             | 5                   | Non-durable                   |
| <i>Parinari salomonensis</i> C. T. White  | Rosaceae         | BSIP parinari                            | malaone, one one              | BSIP                    | (T2) <sup>b</sup>                                | 1622             | 3                   | Slightly durable              |
| <i>Pimeleodendron amboinicum</i> Hassk.   | Euphorbiaceae    | pimeleodendron                           |                               | TPNG                    | T4, C4, R5                                       | 1340             | n.t.                |                               |
| <i>Planchonella firma</i> (Miq.) Dub. and <i>Palaquium amboinense</i> Burck. (regarded as one commercial group) | Sapotaceae       | BSIP planchonella                        | faibaru, maliolo, oora, ororo | BSIP                    | (T3-4) <sup>a</sup> , (R4-5) <sup>a</sup>        | 1625             | 2 }<br>1 }          | Slightly durable              |
| <i>Planchonella kaernbachiana</i> (Engl.) H. J. Lam.  | Sapotaceae       | NG planchonella                          | red silkwood                  | TPNG                    | R4†<br>(T3-4) <sup>c</sup> , (R4-5) <sup>a</sup> | 1326             | 4                   | Non-durable                   |
| <i>Planchonella thyrsoides</i> C. T. White  | Sapotaceae       | BSIP planchonella                        | kete                          | BSIP                    | (T3-4) <sup>a</sup> , (R4-5) <sup>a</sup>        | 1616             | n.t.                |                               |
| <i>Planchonella torricellensis</i> (K. Schum.) H. J. Lam.   | Sapotaceae       | NG planchonella                          | red silkwood                  | TPNG                    | T3-4, (R4-5) <sup>a</sup>                        | 1368             | 5                   | Slightly durable              |
| <i>Planchonella vitensis</i> Gillespie  | Sapotaceae       | Fijian planchonella                      | sarosaro                      | Fiji                    | (T3-4) <sup>a</sup> , (R4-5) <sup>a</sup>        | 1557             | 5                   | Slightly durable              |
| <i>Planchonia papuana</i> R. Knuth  | Leceythidaceae   | planchonia                               |                               | TPNG                    | T3   | 1357             | 5                   | Moderately durable            |
| <i>Pleogynium timoriense</i> (DC.) Leenh.   | Anacardiaceae    | pleiogynium                              |                               | TPNG                    |  | 1399             | 5                   | Durable                       |
| <i>Podocarpus amarus</i> Bl.  | Podocarpaceae    | black pine                               | podocarp                      | TPNG                    | T4, (R2-3) <sup>a</sup>                          | 1361             | 3                   | Non-durable                   |

† R4 refers only to *P. amboinense*.

TABLE 7 (Continued)

| Timber Species  | Botanical Family           | Standard Trade Common Name (AS0118-1968) | Other Trade Names             | Origin of Test Material | Durability Ratings by Previous Authors | DFP Ship No. | No. of Trees Tested | Laboratory Durability Ratings |
|---|----------------------------|--|-------------------------------|-------------------------|--|--------------|---------------------|-------------------------------|
| <i>Podocarpus imbricatus</i> Bl. (syn. <i>P. javanicus</i> Bl.)—see <i>Dacrycarpus imbricatus</i> |                            |  |                               | Fiji                    |  | 1426         |                     |                               |
| <i>Podocarpus nerifolius</i> D. Don   | Podocarpaceae              | Fijian podocarp                          | kuasi                         | Fiji                    | A2, (R2-3) <sup>a</sup>                | 1414         | 4                   | Moderately durable            |
| <i>Podocarpus vitiensis</i> Seem.—see <i>Decussocarpus vitiensis</i>                              |                            |  |                               | Fiji                    |  | 1413         |                     |                               |
| <i>Polyalthia oblongifolia</i> C. B. Robinson   | Annonaceae                 | yellow lacewood                          |                               | TPNG                    | T4, C4                                 | 1377         | n.t.                |                               |
| <i>Pometia pinnata</i> Forst.   | Sapindaceae                | taun                                     | ako, dawa                     | BSIP                    | T3, (R3-5) <sup>a</sup>                | 1601         | n.t.                |                               |
| <i>Pometia tomentosa</i> (Bl.) Teyss. et Binn.  | Sapindaceae                | taun                                     |                               | TPNG                    | T3, (R3-5) <sup>a</sup>                | 1312         | 5                   | Slightly durable              |
| <i>Pterocarpus indicus</i> Willd.   | Leguminosae (Papilionatae) | NG rosewood                              |                               | TPNG                    | T1, R2                                 | 1301         | 5                   | Moderately durable            |
| <i>Pterocymbium beccarii</i> K. Schum.  | Sterculiaceae              | amberoi                                  |                               | TPNG                    | T4, C5                                 | 1306         | 5                   | Non-durable                   |
| <i>Pterygota horsfieldii</i> (R. Br.) Kosterm. (syn. <i>P. forbesii</i> F. Muell.)                | Sterculiaceae              | white tulip oak                          |                               | TPNG                    | T3, R3-5                               | 1369         | 5                   | Non-durable                   |
| <i>Samanea saman</i> (Jacq.) Merr. [syn. <i>Pithecellobium saman</i> (Jacq.) Benth.]              | Leguminosae (Mimosoideae)  | raintree                                 | mocomoco, vaivai-ni-vaivalagi | Fiji                    |  | 1558         | n.t.                |                               |
| <i>Schizomeria serrata</i> (Hochr.) Hochr. (syn. <i>S. floribunda</i> Schltr.)                    | Cunoniaceae                | schizomeria                              | pink birch                    | TPNG                    | T4, R4-5                               | 1383         | 5                   | Slightly durable              |
| <i>Schizomeria serrata</i> (Hochr.) Hochr. (syn. <i>S. floribunda</i> Schltr.)                    | Cunoniaceae                | schizomeria                              | beabea                        | BSIP                    | T4, R4-5                               | 1613         | n.t.                |                               |
| <i>Serianthes myriadenia</i> Planch.  | Leguminosae (Mimosoideae)  | vaivai-ni-veikau                         |                               | Fiji                    |  | 1410         | 5                   | Slightly durable              |
| <i>Sloanea forbesii</i> F. Muell.   | Elaeocarpaceae             | sloanea                                  | carabeen                      | TPNG                    | T4, (R5) <sup>a</sup>                  | 1385         | 5                   | Non-durable                   |
| <i>Sloanea</i> sp.  | Elaeocarpaceae             | sloanea                                  | carabeen                      | TPNG                    | (T4) <sup>a</sup> , (R5) <sup>a</sup>  | 1384         | 5                   | Non-durable                   |
| <i>Spondias dulcis</i> Park.  | Anacardiaceae              | spondias                                 |                               | TPNG                    | T4                                     | 1308         | 5                   | Non-durable                   |
| <i>Sterculia shillinglawii</i> F. Muell.  | Sterculiaceae              | NG sterculia                             | lacewood                      | TPNG                    | T4                                     | 1376         | n.t.                |                               |
| <i>Sterculia vitiensis</i> Seem.  | Sterculiaceae              | Fijian sterculia                         | waci-waci, lacewood           | Fiji                    | (T4) <sup>a</sup>                      | 1562         | n.t.                |                               |

TABLE 7 (Continued)

| Timber Species   | Botanical Family | Standard Trade Common Name (AS0118-1968) | Other Trade Names | Origin of Test Material | Durability Ratings by Previous Authors | DFP Shipment No. | No. of Trees Tested | Laboratory Durability Ratings |
|--|------------------|--|-------------------|-------------------------|--|------------------|---------------------|-------------------------------|
| <i>Swietenia macrophylla</i> King  | Meliaceae        | American mahogany                        |                   | Fiji (plntn)            | A3                                     | 1401             | 5                   | Moderately durable            |
| <i>Syzygium brackenridgei</i> C. Muell.—see <i>Syzygium</i> spp. (yasi-yasi II)            |                  |  |                   | Fiji                    |  | 1406             |                     |                               |
| <i>Syzygium buettnerianum</i> (K. Schum.) Niedenzu   | Myrtaceae        | NG satinash                              | NG watergum       | TPNG                    | T2-3, C3                               | 1305             | 5                   | Moderately durable            |
| <i>Syzygium curvistylum</i> (Gill.) Merr. et Perry—see <i>Syzygium</i> spp. (yasi-yasi II) |                  |  |                   | Fiji                    |  | 1406             |                     |                               |
| <i>Syzygium fijiense</i> (Gill.) Merr. et Perry—see <i>Syzygium</i> spp. (yasi-yasi II)    |                  |  |                   | Fiji                    |  | 1406             |                     |                               |
| <i>Syzygium nidie</i> Guill.—see <i>Syzygium</i> spp. (yasi-yasi I)                        |                  |  |                   | Fiji                    |  | 1406             |                     |                               |
| <i>Syzygium</i> spp.   | Myrtaceae        |  |                   | Fiji                    | A2                                     | 1406             |                     |                               |
| Small-leaf group   |                  |  |                   |                         |  |                  |                     |                               |
| <i>Eugenia effusa</i> A. Gray  |                  |  |                   |                         |  |                  | 4                   | Moderately durable            |
| <i>Syzygium nidie</i> Guill.   |                  |  |                   |                         |  |                  | 3                   |                               |
| Medium-leaf group  |                  |  |                   |                         |  |                  | 2                   |                               |
| <i>Acicalyptus elliptica</i> A. C. Smith   |                  |  |                   |                         |  |                  | 1                   |                               |
| <i>A. eugenioides</i> (Seem.) Drake  |                  |  |                   |                         |  |                  | 1                   |                               |
| <i>A. longiflora</i> A. C. Smith   |                  |  |                   |                         |  |                  | 1                   |                               |
| <i>Syzygium brackenridgei</i> C. Muell.  |                  |  |                   |                         |  |                  | 1                   |                               |
| <i>S. curvistylum</i> (Gill.) Merr. et Perry   |                  |  |                   |                         |  |                  | 1                   |                               |
| <i>S. fijiense</i> (Gill.) Merr. et Perry (regarded as one commercial group)               |                  |  |                   |                         |  |                  | 1                   |                               |
| <i>Terminalia brassii</i> Exell  | Combretaceae     | brown                                    |                   | TPNG                    | T4                                     | 1400             | n.t.                |                               |
| <i>Terminalia brassii</i> Exell  | Combretaceae     | terminalia brown                         | dafo              | BSIP                    | T4                                     | 1603             | n.t.                |                               |
|  |                  | terminalia                               |                   |                         |  |                  |                     |                               |

TABLE 7 (Continued)

| Timber Species  | Botanical Family | Standard Trade Common Name (AS0118-1968) | Other Trade Names       | Origin of Test Material | Durability Ratings by Previous Authors | DFP Shipment No. | No. of Trees Tested | Laboratory Durability Ratings |
|---|------------------|--|-------------------------|-------------------------|--|------------------|---------------------|-------------------------------|
| <i>Terminalia calamansanai</i> (Blanco) Rolfe                   | Combretaceae     | yellow terminalia                        | kako, kwako, sualisualo | BSIP                    |  | 1611             | n.t.                |                               |
| <i>Terminalia complanata</i> K. Schum.                          | Combretaceae     | yellow terminalia                        |                         | TPNG                    | T3-4, C4                               | 1378             | 4                   | Non-durable                   |
| <i>Terminalia kaernbachii</i> Warb.                             | Combretaceae     | brown terminalia                         |                         | TPNG                    | T3-4, C5                               | 1333             | 5                   | Non-durable                   |
| <i>Terminalia pterocarpa</i> Melville et Green                  | Combretaceae     | Indian almond                            | tivi                    | Fiji                    | A3                                     | 1418             | 4                   | Non-durable                   |
| <i>Terminalia</i> spp.  | Combretaceae     |  | terminalia              | TPNG                    |  | 1392             | n.t.                |                               |
| <i>Terminalia</i> spp.  | Combretaceae     |  | terminalia              | TPNG                    |  | 1496             | n.t.                |                               |
| <i>Tetrameles nudiflora</i> R. Br.                              | Datiaceae        | tetrameles                               |                         | TPNG                    | T4, R5                                 | 1375             | 5                   | Non-durable                   |
| <i>Toona sureni</i> Merr. (formerly <i>Cedrela toona</i> Roxb.) | Meliaceae        | red cedar                                |                         | TPNG                    | T2                                     | 1309             | 5                   | Slightly durable              |
| <i>Trichospermum richii</i> (A. Gray) Seem.                     | Tiliaceae        | mako                                     |                         | Fiji                    |  | 1423             | 4                   | Non-durable                   |
| <i>Tristiropsis acutangula</i> Radlk.                           | Sapindaceae      | tristiropsis                             |                         | BSIP                    | (T4) <sup>b</sup>                      | 1632             | 3                   | Slightly durable              |
| <i>Tristiropsis canarioides</i> Boerl.                          | Sapindaceae      | tristiropsis                             |                         | TPNG                    | (T4) <sup>b</sup>                      | 1388<br>1388A    | 5                   | Slightly durable              |
| <i>Vitex cofassus</i> Reinw. ex Bl.                             | Verbenaceae      | NG vitex                                 |                         | TPNG                    | T2, (R1-2) <sup>a</sup>                | 1304             | 5                   | Durable                       |
| <i>Xanthophyllum papuanum</i> Melch.                            | Polygalaceae     | NG boxwood                               |                         | TPNG                    | R5, (T3-4) <sup>a,c</sup>              | 1379             | 5                   | Moderately durable            |
| <i>Xanthophyllum papuanum</i> Melch.                            | Polygalaceae     | BSIP boxwood                             | mole                    | BSIP                    | R5, (T3-4) <sup>a,c</sup>              | 1629             | n.t.                |                               |
| <i>Xylocarpus granatum</i> Koen.                                | Meliaceae        | cedar mangrove                           | lalato                  | BSIP                    | T3                                     | 1633             | n.t.                |                               |

TABLE 8  
INDEX OF TIMBERS LISTED IN TABLE 7  
Common names are cross referenced to botanical names, those appearing in bold  
type being standard trade names

| Common Name          | Botanical Name   |
|----------------------|--|
| a'asa                | <i>Endospermum medullosum</i>                                |
| adoa                 | <i>Canarium salomonese</i>                                   |
| aiasila              | <i>Neoscortechinia forbesii</i>                              |
| aibu                 | <i>Eugenia onesima</i>                                       |
| aifau                | <i>Eugenia tierneyana</i>                                    |
| aimela               | <i>Eugenia onesima</i>                                       |
| airande              | <i>Dysoxylum</i> spp. (No. 1631)                             |
| aisiksiki            | <i>Maranthes corymbosa</i>                                   |
| aitonga              | <i>Alstonia scholaris</i>                                    |
| ako                  | <i>Pometia pinnata</i>                                       |
| albizzia, BSIP       | <i>Albizia</i> spp.  |
| albizzia, NG         | <i>Albizia falcata</i>                                       |
| almond, Indian       | <i>Terminalia pterocarpa</i>                                 |
| amberoi              | <i>Pterocymbium beccarii</i>                                 |
| amoor, BSIP and NG   | <i>Amoor cucullata</i> (Nos. 1618, 1310)                     |
| amunu                | <i>Dacrycarpus imbricatus</i>                                |
| anisoptera, NG       | <i>Anisoptera polyandra</i>                                  |
| antiaris, NG         | <i>Antiaris toxicaria</i>                                    |
| arokoko              | <i>Gmelina moluccana</i> (No. 1606)                          |
| ash, scaly           | <i>Ganophyllum falcatum</i>                                  |
| ash, silver, NG      | <i>Flindersia amboinensis</i>                                |
| <br>                 |  |
| basswood, BSIP       | <i>Endospermum medullosum</i> (No. 1605)                     |
| basswood, Fijian     | <i>Endospermum macrophyllum</i>                              |
| basswood, NG         | <i>Endospermum medullosum</i> (No. 1321)                     |
| ba'ula               | <i>Calophyllum kajewskii</i>                                 |
| bauvudi              | <i>Palaquium fidjiense</i>                                   |
| beabea               | <i>Schizomeria serrata</i>                                   |
| beech, NG            | <i>Nothofagus perryi</i> (Nos. 1495, 1491)                   |
| beech, Wau           | <i>Elmerrillia papuana</i>                                   |
| beech, white         | <i>Gmelina moluccana</i> (Nos. 1374, 1606)                   |
| birch, pink          | <i>Schizomeria serrata</i>                                   |
| bishop wood          | <i>Bischofia javanica</i>                                    |
| boxwood, BSIP and NG | <i>Xanthophyllum papuanum</i> (Nos. 1629, 1379)              |
| brachychiton, NG     | <i>Brachychiton carruthersii</i>                             |
| bridelia             | <i>Bridelia minutiflora</i>                                  |
| buabua               | <i>Fagraea gracilipes</i>                                    |
| buchanania           | <i>Buchanania macrocarpa</i>                                 |
| bulangali            | <i>Canarium</i> spp. (No. 1628)                              |
| burckella, BSIP      | <i>Burckella obovata</i>                                     |
| <br>                 |  |
| calophyllum, BSIP    | <i>Calophyllum kajewskii</i> , <i>C. vitiense</i>            |
| calophyllum, bush    | <i>Calophyllum papuanum</i>                                  |
| calophyllum, Fijian  | <i>Calophyllum</i> spp.                                      |
| calophyllum, NG      | <i>Calophyllum papuanum</i>                                  |
| campnosperma         | <i>Campnosperma brevipetiolata</i>                           |
| canarium, BSIP       | <i>Canarium salomonese</i> , <i>Canarium</i> spp. (No. 1628) |

TABLE 8 (Continued)

| Common Name           | Botanical Name   |
|-----------------------|--|
| canarium, Fijian      | <i>Canarium</i> spp. (No. 1407/1425)                   |
| canarium, NG          | <i>Canarium oleosum</i>                                |
| carabeen              | <i>Sloanea forbesii</i> , <i>Sloanea</i> sp.           |
| cathormion            | <i>Cathormion umbellatum</i>                           |
| cedar, island         | <i>Calophyllum papuanum</i>                            |
| cedar, pencil, Fijian | <i>Myristica</i> spp.                                  |
| cedar, red            | <i>Toona sureni</i>                                    |
| celtis, BSIP          | <i>Celtis latifolia</i> , <i>C. philippinensis</i>     |
| celtis, NG            | <i>Celtis nymanii</i>                                  |
| cheesewood            | <i>Alstonia scholaris</i> , <i>A. spectabilis</i>      |
| cheesewood, white     | <i>Alstonia scholaris</i>                              |
| chisocheton           | <i>Chisocheton schumannii</i> , <i>Chisocheton</i> sp. |
| cinnamomum            | <i>Cinnamomum</i> sp.                                  |
| citriodora            | <i>Eucalyptus citriodora</i>                           |
| cordia, NG            | <i>Cordia dichotoma</i>                                |
| cryptocarya           | <i>Cryptocarya</i> spp.                                |
| dacrydium             | <i>Dacrydium</i> spp.                                  |
| dafo                  | <i>Terminalia brassii</i>                              |
| dakua makadre         | <i>Agathis vitiensis</i>                               |
| dakua salusalu        | <i>Decussocarpus vitiensis</i>                         |
| damanu                | <i>Calophyllum</i> spp.                                |
| dawa                  | <i>Pometia pinnata</i>                                 |
| deglupta              | <i>Eucalyptus deglupta</i>                             |
| dillenia              | <i>Dillenia salomonensis</i>                           |
| doi                   | <i>Alphitonia zizyphoides</i>                          |
| drypetes, NG          | <i>Drypetes</i> spp.                                   |
| duabanga, NG          | <i>Duabanga moluccana</i>                              |
| dysoxylum             | <i>Dysoxylum</i> sp.                                   |
| ebony, NG             | <i>Diospyros</i> sp.                                   |
| elmerril              | <i>Elmerrillia papuana</i>                             |
| erima                 | <i>Octomeles sumatrana</i>                             |
| fai                   | <i>Albizia</i> spp.                                    |
| faibaru               | <i>Palaquium</i> spp., <i>Planchonella firma</i>       |
| faigona               | <i>Burckella obovata</i>                               |
| gaganu                | <i>Albizia</i> spp.                                    |
| galip                 | <i>Canarium indicum</i>                                |
| garawa                | <i>Anisoptera polyandra</i>                            |
| garo-garo             | <i>Mastixiodendron pachyclados</i>                     |
| garuga                | <i>Garuga floribunda</i>                               |
| giam                  | <i>Hopea iriana</i>                                    |
| gripe                 | <i>Nothofagus perryi</i> (Nos. 1495, 1491)             |
| gum, lemon-scented    | <i>Eucalyptus citriodora</i>                           |
| gwaragwaro            | <i>Calophyllum vitiense</i>                            |
| gwatasaliu            | <i>Alstonia spectabilis</i>                            |
| hardwood, yellow      | <i>Neonauclea papuana</i>                              |
| heritiera, NG         | <i>Heritiera</i> sp.                                   |
| hopea                 | <i>Hopea iriana</i>                                    |
| hui                   | <i>Elmerrillia papuana</i>                             |



TABLE 8 (Continued)

| Common Name        | Botanical Name  |
|--------------------|---|
| ilimo              | <i>Octomeles sumatrana</i>                                  |
| ironbark, scrub    | <i>Bridelia minutiflora</i>                                 |
| kako               | <i>Terminalia calamansanai</i>                              |
| kamarere           | <i>Eucalyptus deglupta</i> (Nos. 1320, 1560)                |
| kandis             | <i>Garcinia myrtifolia</i>                                  |
| karamati           | <i>Campnosperma brevipetiolata</i>                          |
| karamut            | <i>Campnosperma brevipetiolata</i>                          |
| kauceuti           | <i>Kermadecia vitiensis</i>                                 |
| kaudamu            | <i>Myristica</i> spp.                                       |
| kaunicina-kaunigai | <i>Canarium</i> spp. (No. 1407/1425)                        |
| kaunigai           | <i>Canarium</i> spp. (No. 1407/1425)                        |
| kauri, East Indian | <i>Agathis dammara</i>                                      |
| kauri, Fijian      | <i>Agathis vitiensis</i>                                    |
| kauvula            | <i>Endospermum macrophyllum</i>                             |
| kete               | <i>Planchonella thyrsoidea</i>                              |
| ketekete           | <i>Campnosperma brevipetiolata</i>                          |
| kiso               | <i>Chisocheton schumannii</i> , <i>Chisocheton</i> sp.      |
| koka               | <i>Bischofia javanica</i>                                   |
| kona               | <i>Burckella obovata</i>                                    |
| kuasi              | <i>Podocarpus neriifolius</i>                               |
| kwako              | <i>Terminalia calamansanai</i>                              |
| kwila              | <i>Intsia bijuga</i> (Nos. 1300, 1421)                      |
| labula             | <i>Anthocephalus chinensis</i>                              |
| lacewood           | <i>Sterculia shillinglawii</i> , <i>Sterculia vitiensis</i> |
| lacewood, yellow   | <i>Polyalthia oblongifolia</i>                              |
| laelae             | <i>Celtis philippinensis</i>                                |
| lalato             | <i>Xylocarpus granatum</i>                                  |
| lamilami           | <i>Archidendron oblongum</i>                                |
| laran              | <i>Anthocephalus chinensis</i>                              |
| laubu              | <i>Garcinia myrtifolia</i>                                  |
| la'usi             | <i>Celtis latifolia</i>                                     |
| mahogany, American | <i>Swietenia macrophylla</i>                                |
| mahogany, NG       | <i>Dysoxylum</i> sp.  |
| mako               | <i>Trichospermum richii</i>                                 |
| malamalarufa       | <i>Eugenia tierneyana</i>                                   |
| malangali          | <i>Canarium</i> spp. (No. 1628)                             |
| malaone            | <i>Parinari salomonensis</i>                                |
| malas              | <i>Homalium foetidum</i>                                    |
| maliolo            | <i>Palaquium</i> spp., <i>Planchonella firma</i>            |
| mamafai            | <i>Albizia</i> spp.   |
| mango              | <i>Mangifera minor</i>                                      |
| mangosteen         | <i>Garcinia myrtifolia</i>                                  |
| mangrove, cedar    | <i>Xylocarpus granatum</i>                                  |
| manilkara          | <i>Manilkara kanosiensis</i>                                |
| maniltoa           | <i>Maniltoa psilogyne</i> , <i>Maniltoa</i> spp.            |
| maple, Fijian      | <i>Palaquium fidiense</i>                                   |
| maple, NG          | <i>Flindersia amboinensis</i>                               |
| maple, NG          | <i>Flindersia heterophylla</i> , <i>F. pimenteliana</i>     |

TABLE 8 (Continued)

| Common Name           | Botanical Name   |
|-----------------------|--|
| maple, scented        | <i>Flindersia heterophylla</i>   |
| maple, silkwood       | <i>Flindersia pimenteliana</i>   |
| masiratu              | <i>Degeneria vitiensis</i>   |
| mavota                | <i>Gonystylus punctatus</i>  |
| milo                  | <i>Elaeocarpus sphaericus</i> (No. 1608)                                       |
| milkwood              | <i>Alstonia scholaris</i>  |
| mocomoco              | <i>Samanea saman</i>   |
| moivi                 | <i>Maniltoa</i> spp.   |
| mole                  | <i>Xanthophyllum papuanum</i>  |
| moustiquaire          | <i>Cryptocarya</i> spp.  |
| mudi                  | <i>Dillenia salomonensis</i>   |
| neubergia             | <i>Neubergia corynocarpa</i>   |
| nunura                | <i>Gonystylus macrophyllus</i>   |
| nutmeg                | <i>Horsfieldia irya</i> , <i>Myristica buchneriana</i> , <i>Myristica</i> spp. |
| oak, NG               | <i>Castanopsis acuminatissima</i>  |
| oak, tulip, white     | <i>Pterygota horsfieldii</i>   |
| obah                  | <i>Eugenia onesima</i> , <i>E. tierneyana</i> , <i>Eugenia</i> sp.             |
| one one               | <i>Parinari salomonensis</i>   |
| oora                  | <i>Planchonella firma</i>  |
| ororo                 | <i>Planchonella firma</i>  |
| pai                   | <i>Araucaria hunsteinii</i>  |
| palaquium, BSIP       | <i>Palaquium</i> spp.  |
| palaquium, Fijian     | <i>Palaquium hornei</i>  |
| parinari, BSIP        | <i>Parinari salomonensis</i>   |
| parinari, Fijian      | <i>Parinari insularum</i>  |
| pimeleodendron        | <i>Pimeleodendron amboinicum</i>   |
| pine, black           | <i>Podocarpus amarus</i>   |
| pine, Bulolo          | <i>Araucaria hunsteinii</i>  |
| pine, kauri           | <i>Agathis dammara</i>   |
| pine, klinki          | <i>Araucaria hunsteinii</i>  |
| pine, milky           | <i>Alstonia scholaris</i>  |
| planchonella, BSIP    | <i>Planchonella firma</i> , <i>P. thyrsoides</i>                               |
| planchonella, Fijian  | <i>Planchonella vitiensis</i>  |
| planchonella, NG      | <i>Planchonella kaernbachiana</i> , <i>P. torricellensis</i>                   |
| planchonia            | <i>Planchonia papuana</i>  |
| pleiogynium           | <i>Pleiogynium timoriense</i>  |
| podocarp              | <i>Podocarpus amarus</i>   |
| podocarp, Fijian      | <i>Podocarpus neriifolius</i>  |
| podocarp, red         | <i>Dacrycarpus imbricatus</i> , <i>Decussocarpus vitiensis</i>                 |
| quandong, BSIP and NG | <i>Elaeocarpus sphaericus</i> (Nos. 1608, 1337)                                |
| qumu                  | <i>Acacia richii</i>   |
| raintree              | <i>Samanea saman</i>   |
| ramin, BSIP           | <i>Gonystylus macrophyllus</i>   |
| ramin, Fijian         | <i>Gonystylus punctatus</i>  |
| rassu                 | <i>Araucaria hunsteinii</i>  |
| rosarosa              | <i>Heritiera ornithocephala</i>  |

TABLE 8 (Continued)

| Common Name             | Botanical Name  |
|-------------------------|---|
| rosewood, NG            | <i>Pterocarpus indicus</i>  |
| rufa                    | <i>Eugenia tierneyana</i>   |
| sa                      | <i>Parinari insularum</i>   |
| sacau                   | <i>Palaquium hornei</i>   |
| sarosaro                | <i>Planchonella vitiensis</i>   |
| sasauira                | <i>Dysoxylum</i> spp. (Nos. 1552, 1631)   |
| satinash, NG            | <i>Eugenia</i> sp.  |
| satinash, NG            | <i>Syzygium buettnerianum</i>   |
| satinwood, pink         | <i>Buchanania macrocarpa</i>  |
| schizomeria             | <i>Schizomeria serrata</i> (Nos. 1383, 1613)  |
| she-oak, beach, Fijian  | <i>Casuarina nodiflora</i>  |
| siliu'u                 | <i>Alstonia spectabilis</i>   |
| silkwood, red           | <i>Palaquium hornei</i> , <i>Planchonella kaernbachiana</i> ,<br><i>P. torricellensis</i> |
| silkwood, white, Fijian | <i>Endospermum macrophyllum</i>   |
| siris, white            | <i>Ailanthus peekelii</i>   |
| sloanea                 | <i>Sloanea forbesii</i> , <i>Sloanea</i> sp.  |
| spondias                | <i>Spondias dulcis</i>  |
| sterculia, Fijian       | <i>Sterculia vitiensis</i>  |
| sterculia, NG           | <i>Sterculia shillinglawii</i>  |
| suala                   | <i>Alstonia scholaris</i>   |
| sualisualo              | <i>Terminalia calamansanai</i>  |
| taba'a                  | <i>Alstonia scholaris</i>   |
| taun                    | <i>Pometia pinnata</i> , <i>P. tomentosa</i>  |
| terminalia              | <i>Terminalia</i> spp. (Nos. 1392, 1496)  |
| terminalia, brown       | <i>Terminalia brassii</i> (Nos. 1400, 1603), <i>T. kaernbachii</i>                        |
| terminalia, yellow      | <i>Terminalia calamansanai</i> , <i>T. complanata</i>                                     |
| tetrameles              | <i>Tetrameles nudiflora</i>   |
| tivi                    | <i>Terminalia pterocarpa</i>  |
| tristiropsis            | <i>Tristiropsis acutangula</i> , <i>T. canarioides</i>                                    |
| tumi                    | <i>Diospyros</i> sp.  |
| vaivai-ni-valalagi      | <i>Samanea saman</i>  |
| vaivai-ni-veikau        | <i>Serianthes myriadenia</i>  |
| velau                   | <i>Casuarina nodiflora</i>  |
| vesi                    | <i>Intsia bijuga</i>  |
| vitex, NG               | <i>Vitex cofassus</i>   |
| vuga                    | <i>Metrosideros collina</i>   |
| vutu                    | <i>Barringtonia edulis</i>  |
| waci-waci               | <i>Sterculia vitiensis</i>  |
| walnut, NG              | <i>Dracontomelum mangiferum</i>   |
| walnut, Pacific         | <i>Dracontomelum mangiferum</i>   |
| watergum                | <i>Eugenia</i> sp.  |
| watergum, NG            | <i>Syzygium buettnerianum</i>   |
| yaka                    | <i>Dacrydium</i> spp.   |
| yasi-yasi I and II      | <i>Syzygium</i> spp.  |

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